



# Joint Pipeline Office

## 2001/2002 Annual Report





## *From the AO and SPC...*

Dear Readers:

There's been a flurry of activities in the Joint Pipeline Office (JPO) over the past two years as we went through the right-of-way (ROW) renewal processes for the Trans-Alaska Pipeline System (TAPS) and five North Slope pipelines. The project workload was heavy (including the Kenai Kachemak Gas Pipeline ROW issued 10 months ahead of schedule), the processes were high profile, and preparation of an Environmental Impact Statement (EIS) for the TAPS right-of-way renewal was unique. JPO has devoted significant time and energy to this project since 1999 finishing two years ahead of the expiration dates. The State Lease signing on November 26, 2002 and Federal Record of Decision (ROD) signing on January 8, 2003 were certainly among our proudest moments.

The original Federal Grant and State Lease were issued to the TAPS owners in 1974 for 30 years, the maximum time a federal grant could be issued. The agencies have always required the TAPS owners to maintain the system for an unspecified period of time, which, for all intents and purposes, is for the length of time it is economic.

Understanding how the system works by initiating a maintenance strategy identified as Reliability Centered Maintenance; how and where it can fail; identifying new influences on operations, the environment, and safety; and seeing that the necessary programs and processes are in place to maintain the system for the future is what JPO is about.

The economic value derived from TAPS and the oil and gas pipelines that JPO oversees is substantial. The industry provides good jobs that support communities throughout Alaska and the nation. Plentiful oil and gas resources contribute to the economic base for state government operations. The nation has a continued source of oil with TAPS contributing 17% of the nation's production.

TAPS continues to operate efficiently and effectively but incidents do occur. The Milepost 400 Bullet Hole Incident in October 2001 was one such incident. Alyeska and the agencies performed a model response. Innovative thinking and new technology limited the damage to the pipeline and its surroundings. "After actions" continue to result in improved and innovative technology that could be applied in the event of a similar incident in the future.

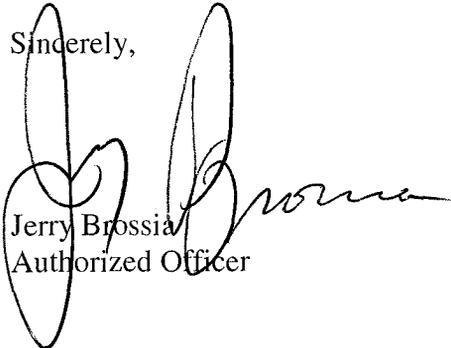
A 7.9 earthquake shook interior Alaska in November 2002. There was minor damage to TAPS, however, the system reacted as it was designed to, no oil spilled, response, and restart by Alyeska and the agencies was exemplary. Engineers and scientists alike have marveled at how well designed the pipeline was to withstand this major seismic event. A recent U.S. Geological Survey pamphlet touted the TAPS design in an article titled *The Trans-Alaska Oil Pipeline Survives the Quake – A Triumph of Science and Engineering*. Just like the bullet hole incident, an after action review will capture lessons learned.

The current JPO organization has been in place since 1990. While there are other joint agency ventures in the U.S., JPO is one of the longest-lived and most complex with 13 state and federal agencies. This model is currently being studied in Washington, D.C. which is a testament to JPO's success, not only because of the joint agency concept, but because of the way JPO strives for "one voice" when dealing with industry.

In the last two years, JPO produced volumes of information for the renewal processes. All of this information has been made public. While additional work was produced specifically for renewal, JPO oversight was on going. To meet work plan objectives, deliverables included two Comprehensive Monitoring Reports, Draft and Final Environmental Impact Statements, Memorandums of Agreement, Proposed Commissioner's Statement of Reasons and Written Determination Trans-Alaska Pipeline Right-of-Way Lease Renewal, and Record of Decision. These previously released reports represent a significant portion of the work activities for 2001-2002, therefore, just an overview will be provided.

We hope you take some time to review this report. If you would like additional information, please contact Rhea DoBosh at (907) 257-1338.

Sincerely,



Jerry Brossia  
Authorized Officer



John Kerrigan  
State Pipeline Director

## Table of Contents

List of Acronyms.....	iv
TAPS Right-of-Way Renewal.....	1
JPO Comprehensive Monitoring Program .....	15
Agreements Between JPO and Alyeska .....	19
Milepost 400 TAPS Bullet Hole Response .....	22
TAPS, Pipeline Oil Discharge Prevention and Contingency Plan .....	25
Alaska Native Utilization Agreement .....	27
Authorizations and Permits .....	29
Kenai Kachemak Pipeline Project .....	31
North Slope Pipelines.....	32
2001 - 2002 JPO Chronology of Major Activities .....	39
2003 JPO Work Program Goals.....	43

*Cover photos: Trans-Alaska Pipeline (top left) and caribou near the Alpine Pipeline on the North Slope (lower right).*

## List of Acronyms

AAI	Audit Action Item
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
ANSI	American National Standards Institute
ANUA	Alaska Native Utilization Agreement
AO	Authorized Officer
BLM	Bureau of Land Management
CMP	Comprehensive Monitoring Program
DEIS	Draft Environmental Impact Statement
DGC	Division of Governmental Coordination
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
JPO	Joint Pipeline Office
KKPL	Kenai-Kachemak Pipeline
MLA	Minerals Leasing Act
MMS	Minerals Management Service
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
PLMP	Pipeline Milepost
RCM	Reliability Centered Maintenance
ROD	Record of Decision
ROW	Right-of-Way
SPC	State Pipeline Coordinator
SPCO	State Pipeline Coordinator's Office
TAPAA	Trans-Alaska Pipeline Authorization Act
TAPS	Trans-Alaska Pipeline System
VMT	Valdez Marine Terminal

## TAPS Right-of-Way Renewal

### Introduction

The owner companies of the TAPS applied to the federal Bureau of Land Management (BLM) and Alaska Department of Natural Resources (ADNR) to renew the pipeline ROW Grant and Lease for an additional 30 years on May 2, 2001.

The ADNR and BLM engaged in an integrated and cooperative public process to renew the TAPS Lease and Grant. They signed a Memorandum of Understanding on August 3, 2000 and pledged to work together to ensure an open, efficient, high quality, and consistent renewal process. The State further agreed to partner with BLM in the development of an EIS to ensure State of Alaska interests. The major steps in the process are on the chart following this chapter.

Argonne National Laboratories was selected to complete the EIS review.



The State signed the TAPS ROW Lease Renewal November 26, 2002 in Anchorage. The Federal Record of Decision was signed January 8, 2003 in Washington, D.C.

Pictured at State signing from left to right are: seated, Commissioner of Natural Resources, Pat Pourchot; Governor Tony Knowles; Janetta Pritchard, JPO; standing, Meg Yaeger,

ConocoPhillips; Helvi Sandvik, NANA Development Corp.; Carl Marrs, Cook Inlet Region Inc.; Kevin Myers, ConocoPhillips; Chuck Pierce, Unocal; David Wight, Alyeska Pipeline Service Company; Orie Williams, Doyon Limited; Chuck Chinnis, JPO photographer.

## Background

The TAPS has been operated since 1977 on a ROW that was granted in 1974. TAPS begins at Pump Station 1 near Prudhoe Bay at Deadhorse, Alaska, and ends at the Valdez Marine Terminal on Prince William Sound at Valdez, Alaska. The ROW crosses:

375 miles of federal lands,  
344 miles of state-owned land,  
51 miles of lands owned by Native Alaska Corporations,  
8 miles of land owned by the pipeline company owners, and  
22 miles of private land.

The TAPS owner companies and ownership percentages at the time of renewal were:

TAPS Owners	Ownership Percentages
Amerada Hess Pipeline Corporation	1.5000% (ConocoPhillips acquired this ownership percentage post-renewal)
BP Pipelines (Alaska) Inc.	46.9263%
ExxonMobil Pipeline Company	20.3378%
Phillips Transportation Alaska, Inc.	26.7953%
Unocal Pipeline Company	1.3561%
Williams Alaska Pipeline Company, L.L.C.	3.0845%

Alyeska Pipeline Service Company operates the TAPS under contract with the owner companies.

The BLM and ADNR monitor operation of the TAPS in coordination with other federal and state agencies that authorize and oversee pipelines on federal and state lands. These agencies contribute personnel to the JPO and together they are concerned with safety, environmental protection, pipeline integrity, and regulatory compliance of the TAPS.

## Environmental Impact Statement

The Bureau of Land Management determined that renewal of the Grant would be a major federal action; therefore, the National Environmental Policy Act (NEPA) requires that an EIS be prepared before a decision is made. A Notice of Intent to prepare the TAPS ROW Renewal EIS was published in the Federal Register on July 31, 2001. The JPO renewal team announced the intent to prepare an EIS and advertised the opportunity for public involvement in local media throughout Alaska.

## **Scoping Process**

A way to involve the public is through the “scoping” process. Scoping gives interested parties the chance to comment on a proposed action and to offer issues to be considered in the EIS analyses. Scoping was conducted from July 31 to October 19, 2001.

Open public meetings were held in Anchorage, Barrow, Delta Junction, Fairbanks, Glennallen, and Valdez, Alaska.

More than 1,700 people provided comments, requested information, attended public or tribal consultation meetings, or visited the TAPS Renewal EIS web site. In addition, more than 100 organizations, including Native Alaska; environmental; private industry; and local, state, and federal government agencies, provided comments. Comments were documented during conversations and facilitated discussions at the public meetings. More than 230 individuals and organizations provided comments.

Comments originated from 37 states and the District of Columbia. Of those comments, 48% were from Alaska and 52% were from the other states. Other states had four or fewer commenters, with 11 states having just one. No comments were received from other countries. During the scoping period, a total of 2,411 visits were made by 1,370 visitors to the TAPS Renewal EIS web site.

## **Public Review of Documents**

The public was invited to review and comment on the Draft Environmental Impact Statement (DEIS) and DNR Commissioner’s Statement of Reasons and Proposed Written Determination on July 5, 2002. The public comment period was 45 days or until August 20, 2002 to review and comment on both.

Shortly after the review announcement, a number of environmental and Alaska Native groups requested an extension of the public comment period. The BLM and ADNR considered and responded to the requests. The original 45-day schedule for review of the DEIS and Commissioner’s Statement of Reasons and Proposed Written Determination on renewing the ROW for the TAPS was confirmed. An extension was not granted in large part because TAPS has been operational for 25 years and virtually every aspect of its operations and related environmental impacts are closely and continuously scrutinized by a number of state and federal agencies. This is not a new construction project with alternate routes or new impacts.

## Draft Environmental Impact Statement

The document is in four-volumes, has 1,700 pages, and addresses the physical, environmental, economic and social impacts of renewing TAPS. This process allows for full public disclosure. Three proposed actions were:

- Preferred Alternative: Renew the Federal Agreement and Grant of ROW for 30 years.
- Time-Dependent Alternative: Renew for less than 30 years.
- No-Action Alternative: Do not renew the Grant of ROW.

Based on the analysis of environmental impacts and other factors presented in the DEIS, the BLM preferred alternative was to renew the Grant for an additional 30 years.

## Final Environmental Impact Statement

BLM released the Final Environmental Impact Statement (FEIS) November 29, 2002. The seven-volume document describes the environmental, social, and economic impacts of renewing the TAPS federal ROW for 30 years. It includes responses to and text changes stemming from comments presented by the public during public hearings and public review of the DEIS in July and August.

The public comments consist of 589 messages, letters, or individual testimonies yielding about 3,200 individual comments.



**TAPS at PLMP 605.4  
Access Road 35-1pl-5**

The three alternatives were the same as those listed in the DEIS.

Twelve other alternatives identified by members of the public during the scoping process were also considered, however, they do not meet the criteria for TAPS alternatives.

- Transfer ownership of TAPS to another entity.
- Transfer operation to another common agent.
- Require payment of the Exxon Valdez oil spill settlement.

- Give BLM the authority to fine TAPS owners.
- Establish an advisory committee funded by the TAPS owners.
- Conduct periodic audits.
- Establish an escrow account for TAPS removal and ROW rehabilitation.
- Establish an escrow account to fund emergency aid for loss of subsistence or economic benefit because of TAPS activities, and permit individuals to sue for such aid.
- Establish an escrow account to fund studies of impacts of the TAPS on rural Alaska and to address those impacts.
- Require maintenance of 20% Alaska Native-hire employment and allow Alaska Natives to bring suit for failure to achieve that goal.
- Close the Dalton Highway or restrict access along the highway.
- Increase oil spill response capabilities by training, hiring, and equipping additional local oil spill response crews.

Both State and BLM analyses reviewed mitigation of adverse impacts. The TAPS Owners and the JPO have employed a number of mitigation measures under the Federal Grant. These measures and other oversight steps would continue under an extension of the Federal Grant. Mitigation measures include technical, environmental, and general stipulations as well as by the requirements of the 41 sections of the Federal Grant and the 42 sections of the State Lease.

JPO oversight of TAPS operations includes significant mitigation activities. The fundamental objective of all JPO oversight is to ensure that Alyeska, as the permittees' common agent, complies with the requirements of the Federal Grant and State Lease. JPO member agencies have clear and direct regulatory authority in five compliance activities:

- Issue necessary permits and authorizations to operate TAPS.
- Monitor TAPS and TAPS activities to identify situations requiring corrective action.
- Approve construction or other actions.
- Perform direct compliance or remediation actions, as necessary, to protect public safety and health, the environment, and pipeline integrity.
- Respond to oil spills and other abnormal conditions.

Once the JPO, through the appropriate governmental process, directs Alyeska to conduct a corrective action (including compliance or remediation activities), Alyeska must comply. Alyeska's failure to comply in a sufficient and timely manner may result in civil or criminal penalties levied by regulatory agencies or progressive action by the Authorized Officer and/or State Pipeline Coordinator.

*The Trans-Alaska Pipeline Authorization Act (TAPAA), the Mineral Leasing Act (MLA), and the Federal Grant provide the BLM with the authority to implement changes at any time in TAPS oversight and operation that are protective of human health and the environment. Thus, studying, developing, and implementing mitigation actions represent an ongoing component of the adaptive management business model of JPO (see Section 4.1). In recognition that mitigation of all sorts is an ongoing and required activity, the development of new mitigation measures as an outcome of the NEPA analysis of the proposed action and alternatives is appropriately limited to describing a set of ongoing activities that enhance the efficiency and/or knowledge base of BLM and JPO oversight. Indeed, developing new mitigation strategies only under the current NEPA analysis and waiting until a Record of Decision is issued to implement the mitigation would be contrary to the day-to-day oversight requirements of TAPAA, MLA, the Federal Grant, and the State Lease.*

Some mitigation initiatives that will enhance oversight are:

- Development of a programmatic agreement with the State of Alaska Historic Preservation Office and the National Council on Historic Preservation will guide the protection and mitigation of cultural and historic resources.
- Copper River Basin Spill Analyses – There are several subsections to this initiative addressing improved spill response activities.
- Employee Concern Survey – BLM/JPO have conducted and published three employee concerns surveys of TAPS workers to measure and monitor how they feel about pursuing concerns related to safety, system integrity, and environmental protection. Another survey will be conducted within three years.

- Alaska Native Utilization Agreement (ANUA) – Alyeska and contractors have met the successive interim employment goals of the last three ANUAs executed under Section 29 of the Federal Grant. Alaska Native employment is expected to reach the 20% target by 2004. The monitoring focus is to sustain these employment percentage levels of Alaska Natives and maintain compliance with future ANUAs. In this regard, the BLM will pursue an avenue within the next ANUA to promptly address any decrease in the percentage of Alaska Native employment.

## Federal Record of Decision

The Record of Decision (ROD) was signed by Secretary of the Interior Gail Norton, January 8, 2003, in Washington, D.C.



Pictured at the ROD signing, seated, Gail Norton, Secretary of the Interior; standing from left to right: Drue Pearce, Senior Advisor to the Secretary for Alaskan Affairs; Lisa Murkowski, Senator; Frank Murkowski, Governor; Jerry Brossia, Authorized Officer/JPO; Kathleen Clarke, BLM Director.

The ROD authorizes renewal of the current terms of those portions of the TAPS rights-of-way under the administration of the U.S. of America commencing on January 22, 2004 and extending until January 22, 2034. Prior to this time, the Agreement and Grant of ROW for the TAPS, dated January 23, 1974, has been amended by various changes in law, regulations, and requirements. These prior amendments to the TAPS rights-of-way are to continue in force and effect.

The decision to renew was substantially similar to the Preferred Alternative identified in the FEIS, to renew for 30 years, with the exception that the Secretary exercised existing discretionary authority and required a financial audit of the Owner entities every three years. The terms and conditions of the rights-of-way were renewed to be those set forth in the Federal Grant, except as it was amended by the currently

operative language of Section 28, Nondiscrimination and Equal Employment Opportunity (attached to the ROD as Appendix A).

The ROD is the Secretary of the Interior's renewal document. It includes supporting documentation covered in this chapter relating to the renewal and the following specific findings:

- The TAPS is in commercial operation and is likely to continue in commercial operation until 2034.
- The TAPS is operated and maintained in accordance with the provisions of TAPAA, section 28 of the MLA, as amended, 43 U.S.C. § 185, and the regulations promulgated thereunder.
- A ROW in excess of 50 feet is necessary for the operation and maintenance of the TAPS and to protect the environment and the public safety.
- The current operations of the TAPS are in compliance with the terms of the 1974 Grant and all applicable statutes and regulations.
- Procedures and requirements are in place for the safe operation of the Pipeline to ensure the safety of workers and the public from sudden ruptures and slow degradation of the Pipeline.
- Appropriate disclosures have been made as required in 43 U.S.C. § 185(i).
- The current holders of the TAPS rights-of-way have demonstrated sufficient technical and financial capabilities to operate, maintain and terminate the TAPS. Before the BLM approves the transfer of interest in the TAPS, an investigation is made into the financial and technical capabilities of the proposed holder.
- The holders of the TAPS rights-of-way are not required to post a bond. The parent company of each company holding an interest in the TAPS has executed a continuing guaranty in favor of the United States to cover its financial obligations. New financial assurance review procedures of these guarantees are being instituted by this decision.
- TAPS operates as a common carrier and its tariffs are filed with the Federal Energy Regulatory Commission, as required.
- TAPS was constructed in accordance with the existing federal and state standards for ROW construction after consideration of the potentially conflicting uses of the federal land and, because TAPS is constructed over land owned by both the United States and the State of Alaska, operation and maintenance of TAPS is conducted in compliance with federal and state standards.
- It is the intent of the Department of the Interior that TAPS be renewed and able to continue operations, and that the issuance of the Federal renewal and the State Lease confirms the right for TAPS to operate on lands or rights-of-way necessary for the operation of TAPS, but not owned or controlled by the Permittees

except for the specific instances set forth in the Title section of the ROD.

- The Pipeline has a useful life of at least thirty years, both as a physical structure and as a commercial entity.
- The construction of TAPS cost approximately \$8 billion, and annual operating costs are approximately \$400 million.
- Due to the continuing need in the U.S. for energy products and the need to continue to deliver and develop domestic energy supplies for public purposes the Department of the Interior supports the renewal of TAPS for thirty years.

## **State Pipeline Coordinator's Report**

This report documented the State Pipeline Coordinator's review of the application for renewal of the TAPS ROW Lease. Under the provisions of AS 38.35.110 the TAPS Lease shall be renewable, for a period up to 30 years, so long as the Lessee is:

- in commercial operation;
- in full compliance with state law; and
- in compliance with all terms of the Lease.

The report focused on and identified evidence and documentation of the Lessees' compliance with these three statutory renewal requirements in order to provide the Commissioner of the ADNR with the factual record necessary for his determination on the application for renewal of the TAPS ROW Lease.

During State of Alaska fiscal years 2000 and 2001, JPO staff spent an estimated 1,000 to 1,030 workdays in the field, conducting surveillances, project monitoring, and general TAPS oversight activities. From 1997 through June 2002, a total of 1,273 surveillances, 142 technical or engineering reports, and 65 assessments were performed under the JPO Comprehensive Monitoring Program (CMP). (For additional information on the CMP, please refer to the following section.)

The CMP verifies Lessees' compliance with those requirements of the State Lease (and Federal Grant of ROW) that fall within the scope of the risk-focused annual monitoring program. The documentation of the CMP monitoring and oversight effort is maintained in a computer database in the JPO and that documentation has provided the majority of the evidence relied upon by the SPCO in the TAPS renewal review.

In addition to the JPO's in-house (CMP-based) monitoring of Lease compliance, many lease sections and stipulations impose requirements that are the same as, or overlapped by, legal requirements of state and/or

federal laws and regulations, and that are thus administered and enforced by regulatory agencies outside of the JPO. In cases where another regulatory agency's program monitors and enforces compliance with requirements that include the requirements of a specific Lease section or stipulation, the State Pipeline Coordinator relies primarily on that agency's focused, regulatory enforcement to assure compliance with the included Lease requirements. This reliance limits duplication of efforts while utilizing the subject matter expertise of each regulatory agency to best effect.

After reviewing the Grant and Lease Compliance Report, some lower risk Lease requirements were found to have relatively limited compliance documentation in the JPO database, due to the risk-based focus of the regular CMP process, and not to fall within the regulatory oversight of an outside regulatory agency. In those cases, additional surveillance assignments were added to the 2001 and 2002 JPO work plans specifically for the TAPS renewal review, resulting in supplemental compliance reports on lower-risk requirements.

As a result of the renewal review effort, the SPCO found:

- Lessees are in commercial operation, as evidenced by: production and transportation reports filed daily, monthly and yearly for volume of oil produced and transported through the TAPS system; payment of royalties and taxes on that production, and collection of tariffs on that transportation; and payment of state and local property taxes for TAPS facilities.
- Lessees are in full compliance with State of Alaska law and regulation, based upon reports prepared for TAPS renewal by each state regulatory agency that identify all of the respective agency's statutes and regulations that may have application to the TAPS lessees, and provide an affirmative determination of the lessees' compliance with those statutory and regulatory requirements.
- Lessees are in compliance with all terms and stipulations of the TAPS Lease, based on the administrative record including:
  - State agency compliance reports, for lease requirements that are overlapped by requirements of a specific agency regulatory program;
  - JPO database documentation developed through the risk-management focused Comprehensive Monitoring Program that is continually carried out as the normal JPO oversight and monitoring effort; and

- Supplemental monitoring carried out in 2001 and 2002 to review compliance with lower risk lease requirements that have not been the focus of prior compliance review under the risk-based CMP.

Based upon these findings, the State Pipeline Coordinator recommended to the Commissioner of Natural Resources that the Lease should be renewed. In addition, based on information provided in CMP Report *TAPS Maintenance and Sustained Useful Life, June 2002*, the State Pipeline Coordinator found no reason to constrain the duration of the renewal to a period of less than 30 years.

### **Proposed Commissioner’s Statement of Reasons and Written Determination Trans-Alaska Pipeline Right-of-Way Lease Renewal**

The Commissioner published a Proposed Written Determination on July 5, 2002, recommending renewal of the Lease for 30 years.

The Commissioner directed that the following actions be taken:

- Provide a copy of the Commissioner’s Determination to the Lessees and their agent.
- Make copies of the written determination and the Lease available to the public for viewing.
- Provide copies of the written determination, upon request, to the public at cost.
- Solicit written comments from the public for a minimum of 30 days ending on August 20, 2002 and schedule public hearings in the communities of Cordova, Valdez, Glennallen, Anchorage, Fairbanks, Minto, and Barrow, Alaska.

### **Commissioner’s Final Written Determination Renewal and Amendment of Right-of-Way Lease for the Trans-Alaska Pipeline System and Associated Rights (ADL 63574)**

Based on the findings as outlined in the State Pipeline Coordinator’s Report, the administrative record, information from the Lessees and the independent analyses and reviews presented, the Commissioner determined that the requirements of AS 38.35.110 for renewal of the Lease have been met, that the useful life of the TAPS facilities exceed the applied for 30 year term of renewal, and that the Lease shall therefore be renewed for a period of 30 years. Additionally, any ancillary facilities used in conjunction with the Lease, and applied for in the renewal application, shall be renewed or issued for a like term of 30 years.

Because several public comments were received regarding public involvement in oversight through the proposed establishment of a citizen's oversight group, the Commissioner examined the concept. He determined that it would not appreciably improve existing regulatory oversight of the pipeline because: 1) the SPCO (as a partner in the JPO) comprehensively monitors all aspects of pipeline operation, from engineering to impact on wildlife, with the power to issue corrective compliance orders to the pipeline operator, and regularly published detailed reports of all facets of the SPCO work for public review; and 2) the proposal for a duplicate, non-governmental oversight effort would not be a cost effective means of increasing public access to information on TAPS operational and maintenance issues. The Commissioner did support a process to further encourage the public's involvement and information exchange with the JPO agencies.

### **Additional Supporting Documents**

Two additional reports were produced during the renewal process: *Regulatory Evaluation of the Request For Renewal of the Federal Grant of Right-of-Way For the Trans-Alaska Pipeline System (TAPAA Report)* and *Condition of the Trans-Alaska Pipeline System*. An overview of each follows. These are supporting documents that have received little individual coverage until now.

Two CMP reports produced for renewal are covered in the chapter entitled "JPO Comprehensive Monitoring Program."

### **Regulatory Evaluation of the Request For Renewal of the Federal Grant of Right-of-Way For the Trans-Alaska Pipeline System (TAPAA Report)**

This summary-level report is informational and supplements (does not supplant) the overall renewal effort by focusing on specific federal legal and regulatory requirements for renewal of the Federal Grant and the current status of TAPS in regard to those requirements. Much of the information in support of the statements and conclusions is presented in other documents, including the DEIS and the references cited therein; CMP reports, annual reports, and other documents prepared by the JPO; and information developed and provided to JPO by the TAPS Owners to support their renewal application.

## TAPS Condition Report

The *Condition of the Trans-Alaska Pipeline System* report was prepared to support the evaluation of the request for renewal of the Federal Grant and State Lease.

Since startup, the TAPS has delivered over 14 billion barrels of crude oil from the North Slope to the Valdez Marine Terminal operating 99.6% of the time. The pipeline's high degree of reliability is a result of its engineering design, use of quality products and construction techniques, prudent operation of the system, vigilant oversight by federal and state regulatory agencies, and implementation of a thorough monitoring and maintenance program. **A key element of this program is replacing components to ensure system integrity or to take advantage of technological improvements and efficiencies.**

JPO continually evaluates the condition of various TAPS components through the CMP. This report provided descriptions of those major components, oversight, and maintenance history.

While TAPS is more than 25 years old, it still remains a very robust system. An illustration of the durability of the pipeline is its response to the large earthquake that occurred on the Denali Fault 55 miles west of the pipeline on November 3, 2002. This earthquake measured 7.9 on the Richter scale and caused extensive damage to public roads and other facilities in the area. Although the pipeline moved an estimated seven to nine feet horizontally and two to three feet in the air during the earthquake, it was not breached and no oil was released. Automatic controls initiated shutdown activities when the earthquake struck and Alyeska personnel at the Operations Control Center took manual control of the pipeline and brought TAPS to a safe shutdown condition within an hour. A number of vertical support members were damaged in the area where the pipeline crosses the Denali Fault. The pipeline and valves in this area were checked and temporary repairs made to the bents; oil began flowing through the pipeline within three days. The TAPS is being evaluated for any additional structural damage and repairs will be made as appropriate.

Continued operation of TAPS is contingent on the continuation of an aggressive and thorough monitoring and maintenance program. This is especially important as the pipeline ages. The Reliability Centered Maintenance (RCM) strategy has been implemented for use on TAPS to ensure the functionality of critical systems and subsystems. There are a number of areas where needed improvements have been identified and enhancements and corrective measures are in progress; these include fire protection, telecommunications, and electrical systems. These areas are

not independent and problems in these systems can impact the overall functionality of other systems, e.g., electrical systems are integral to all other TAPS components. The RCM process is being used to support such evaluations and develop maintenance strategies. (For additional information, please refer to the next section, JPO Comprehensive Monitoring Program.)

In summary, the current condition of TAPS is sound. The JPO and Alyeska have worked in a cooperative manner to ensure the integrity of the pipeline. Procedures and processes are in place to identify and perform appropriate corrective actions to maintain this condition. The history of past operations has been good and Alyeska has performed the necessary maintenance actions to ensure the long-term integrity of the pipeline.

## **Outreach – “Government-to-Government”**

The federal government works on a government-to-government basis with Alaska Native Tribes. The government-to-government relationship was formally recognized on November 6, 2000, with Executive Order 13175. As a matter of practice, the BLM coordinates with all Tribal governments, associated Native communities, Native organizations, and individuals who are interested in the TAPS ROW renewal process. The BLM has given substantial consideration to the proper conduct of government-to-government consultations for this project in order to provide for multiple opportunities for Tribal consultation.

The BLM developed an explicit consultation process that offers specific opportunities to “directly and substantially affected” Tribes as required under the government-to-government provisions. Executive Order 13175 stipulates that Tribes identified as “directly and substantially affected” be consulted by federal agencies during the NEPA process. In May 2001, 19 Tribes (later increased to 21) were identified by the BLM as being “directly and substantially” affected by the TAPS ROW renewal process.

Throughout the renewal process, the BLM and the EIS team provided special presentations or further information exchange. The BLM carefully listened to the concerns of the Native people. The majority of concerns were related to employment opportunities, possible impacts on a subsistence lifestyle, the importance of preserving the subsistence-oriented aspects of traditional culture, and spill response activities.

The State of Alaska Millennium Agreement was finalized during the renewal process. It was modeled after the federal consultation process. The Department of Natural Resources participated in many of the outreach activities.

## JPO Comprehensive Monitoring Program (CMP)

Because the TAPS ROW renewal project was underway during 2001-02, virtually all monitoring activities, with a few exceptions, were included in products produced for renewal and are covered in greater detail in the renewal section of this report. Monitoring performed for unplanned activities, such as the Milepost 400 incident, are covered separately.

Oversight activities are systematically and thoughtfully considered then outlined in the work plan. Results from the previous oversight activities are evaluated to ensure that:

- all work plan commitments are met,
- deficiencies identified are corrected or an acceptable corrective action has been developed and accepted, and
- trends or unresolved issues that require additional oversight are revealed.

There has been a continuous effort to improve oversight, streamline processes, and enhance communications over the years. The JPO work plan generally covers more than a year's period of time and is designed to facilitate improvement by identifying office/staff objectives, authority, strategy, commitments, and functions under a unique organizational structure. We incorporate lessons learned and thoughtfully implement change in oversight and structure when it makes sense.

The JPO CMP has undergone significant alteration since 1994. The CMP was designed initially in response to General Accounting Office criticism of oversight efforts and lack of supporting documentation. There had to be a structured way to accomplish monitoring goals and a mechanism to help answer questions and communicate what is overseen, how is oversight conducted, and explain the results of monitoring to a large and varied audience. These elements are the foundation for the work plan to make sure all goals are accomplished.

The CMP is a lot more than just looking for deficiencies. It's about following up and following through to make sure deficiencies are corrected. It's about putting the proper processes in place to make sure those deficiencies do not recur. It's about knowing why deficiencies occur and how different parts of the system are impacted.

## **JPO Work Plan**

Staff assignments are outlined in the work plan. Historically, about 65% of staff time can be planned with the remaining 35% set aside for unplanned/unscheduled work.

JPO has five main TAPS functions:

- Issue authorizations and permits necessary to operate and maintain TAPS.
- Evaluate technical concerns and the physical condition of TAPS.
- Verify compliance and meeting of commitments.
- Respond to incidents and events.
- Outreach to stakeholders and publication of reports.

## **Comprehensive Monitoring Program Reports**

Numerous surveillances and assessments were produced in 2001-2002 as the basis for the two Comprehensive Monitoring Reports mentioned below. As previously mentioned, most all TAPS oversight was included in renewal documents that have all been released individually so this annual report will only provide highlights.

Two specific renewal-supporting Comprehensive Monitoring Reports were included in JPO's 2001 work plan. The first was released in May 2002, an *Examination of Grant and Lease Compliance*. JPO's monitoring program is a way to systematically verify compliance with the Federal Grant and State Lease of Right-of-Way. The program identifies deficiencies and establishes formal notifications of those deficiencies and correction expectations to Alyeska Pipeline Service Company, imposes correction deadlines, tracks and retains information, and verifies results.



***JPO staff generally focus on specific areas and make successive trips. This frequently requires driving the Haul Road to conduct monitoring activities. This presents numerous challenges year round but there are benefits too, such as this beautiful view of Atigun Pass.***

The report goals were to: evaluate each requirement of the Grant and Lease; follow-up and resolve previously reported compliance deficiencies; and summarize the history of TAPS performance with the Grant and Lease by the Permittees/Lessees. The report examined Grant and Lease compliance and provides:

- an overview of JPO history monitoring of TAPS,
- addresses the sections of the Grant and Lease,
- addresses the stipulations of the Grant and Lease.

It is important to note that JPO has never had to resort to the point where Grant and Lease termination was considered. JPO has always been results oriented preferring that Alyeska correct deficiencies or noncompliances. JPO can and has issued Orders, Notices, and Directives in a few instances to correct deficiencies or noncompliance issues, however. Alyeska complied with the Orders, making the necessary corrections.

The Compliance Report also includes an overview of JPO's monitoring program and how oversight is conducted. JPO provides oversight to the operation and maintenance of TAPS in a risk-based manner. It is important that monitoring and maintenance of tasks be put in place to protect against high risk, high consequence failures.

The report documents how all compliance issues are either resolved, have a path to resolution acceptable to JPO, or are targeted for evaluation using the Reliability Centered Maintenance (RCM) process. The RCM protocol is used to examine critical systems and describe their function, determine how they can fail to perform that function, and determine how failure can be mitigated or prevented.

There were seven open findings and one open notice listed in the Compliance Comprehensive Monitoring Program Report. All have been satisfactorily closed. At the end of 2002, there were no open findings. The finding process will continue to be used when appropriate.

The 12<sup>th</sup> CMP report, *TAPS Maintenance and Sustained Useful Life, January 2001 – May 2002*, was released in July 2002. It covers pipeline integrity, summarizes the results of approximately 50 RCM studies, explains the process, identifies the required corrective actions, and outlines the method to track these corrections to completion. JPO established a "systems-based" approach to oversight of TAPS maintenance providing a disciplined strategy that specifically identifies the physical systems and sub-systems that comprise TAPS, the associated user functions with the associated performance standards. While the compliance report addresses issues from a historical viewpoint, the Useful Life report is about the future of TAPS. The report addresses the work

completed to date to identify the various maintenance strategies to preserve the functional requirements of critical TAPS systems. The focus is on maintenance requirements to ensure operational safety, environmental responsibility, and functional reliability of TAPS systems and equipment for the duration of the TAPS physical life. JPO concluded that the physical life of TAPS could be sustained for an unlimited duration provided the system continues to be maintained adequately. Alyeska commitments to JPO through various Memorandums of Agreement serve to demonstrate their willingness to work with JPO to continue to sustain TAPS in a functionally reliable state. Please refer to the chapter titled “Agreements Between JPO and Alyeska” for additional information.

As in the past, monitoring reports will be announced in the JPO weekly reports as they become available.

## Agreements Between JPO and Alyeska

**Five Memorandums of Agreement (MOA)** between JPO and Alyeska were executed in 2001-2002. For many years this has been an established and successful way to come to agreement with Alyeska to resolve issues or ensure certain work is performed and performed to meet all requirements. Some of these prior agreements include the *TAPS Valve Agreement, Cathodic Protection Monitoring of TAPS Agreement, and Quality Assurance Program Improvements Agreement.*

**January 2001 Agreement** – This agreement was all about critical systems on TAPS. It was agreed that JPO would lead critical system(s) integrity reviews that would be conducted in a collaborative and cooperative means with Alyeska. Alyeska would fund the reviews as part of routine oversight of TAPS. Industry accepted methodology, Reliability Centered Maintenance process, was to be used to conduct the analyses. Fourteen points were listed and agreed to by JPO and Alyeska. The Ballast Water Treatment Facility was designated as the pilot model.

The first results from this agreement are included in JPO's 12<sup>th</sup> Comprehensive Monitoring Report, *TAPS Maintenance and Sustained Useful Life, January 2001 – May 2002.*

**February 28, 2002 Agreement** – This agreement was for continuous improvement of the Alyeska compliance systems, quality program, change management, and corrective action processes.

The agreement listed numerous items including the following:

- Corrective and preventive actions to address, resolve, and close Grant and Lease deficiencies and adequacy of change management cited in JPO's Operations and Maintenance CMP Report of 1999 and 2001.
- Closure processes for Audit Action Item (AAI) 1955. This MOA established the Stipulation 1.18 compliance standard for timely update of drawings and documents for critical systems is 180 days.
- Alyeska's corrective action processes will be risk-based, will be compatible with other key work, will include trending of corrective actions, will use categorization methods compatible with the Grant and Lease, and will include JPO notification twice per year of corrective actions on critical items.

**June 2002 Agreement** – This agreement updated the January 19, 2001 agreement. Highlights include:

- JPO and Alyeska modified the scope of work to establish a schedule and sequence for TAPS operations to receive critical systems integrity review, prioritized using accepted principles of risk assessment.
- It was recognized that Alyeska had substantially completed the scope of work identified in the 2001 agreement.
- Alyeska agreed to determine maintenance activities for newly installed or existing systems and equipment in TAPS in accordance with a structured, comprehensive and industry recognized methodology, such as Reliability Centered Maintenance. Alyeska further committed to modifying its maintenance manual, MP 167, to indicate how it will meet this commitment.
- Alyeska committed to complete by the end of 2002, critical systems integrity reviews of remote gate valves, leak detection system and mainline refrigeration units.
- Alyeska committed to verify work on and completion of Reliability Centered Maintenance study recommendations related to functional failures having hidden, safety, or environmental consequences.

**October 24, 2002 Agreement** – This agreement between BLM, DNR, and the Office of Pipeline Safety relates to AAI closure and TAPS Control Upgrade.

- AAI 2076 – The remote terminal units were replaced at all 62 remote gate valve locations. The master terminal units were not replaced as planned because the new fiber optic cable-based telecommunications network did not initially perform as required. These deficiencies are being addressed.
- Alyeska is planning to upgrade the control system that operates all oil movement functions in both the Valdez Marine Terminal and Pipeline locations.
- Design and implementation for a prototype master terminal unit replacement in segment 8 is underway. This is a parallel system to the Real Time Control System and will allow full testing and acceptance of the design.

**November 25, 2002 Agreement** – This agreement between BLM, DNR, and Alyeska relates to TAPS Lightning Protection.

- Alyeska shall analyze all existing TAPS facilities for conformance to Stipulation 3.2.2.6, and NFPA 780-2000 or

ANSI C-5.1-1969 and produce a comprehensive engineering report including a risk analysis. It will include complete information on any facilities where Alyeska proposes a waiver, deferment, or reduction of lightning protection beyond May 31, 2004.

- The JPO will make a determination of facilities where work on lightning protection on TAPS facilities can be waived, deferred, or reduced.
- Alyeska shall correct all non-conformances not specifically waived, deferred, or reduced by the JPO in writing.
- The JPO will evaluate on a case-by-case basis additional enforcement of Stipulation 3.2.2.6 on facilities waived on the basis of proposed near-term replacement if the Strategic Reconfiguration Project is not a verifiable funded project by June 1, 2004.
- All lightning protection will be performed in accordance with Stipulation 3.2.2.6 of the State Lease, Federal Grant, or applicable state or federal laws. The MOA will remain in force until closed by the parties, amended in writing by mutual consent, or all terms of the agreement have been satisfied.

## Milepost 400 TAPS Bullet Hole Response



**MP 400 pipe puncture caused by a bullet**

JPO was notified Thursday, October 4, 2001 that a bullet had pierced the Trans-Alaska Pipeline approximately 80 miles north of Fairbanks near Livengood. A high-pressure crude oil spray resulted. The leak was discovered by aerial security surveillance. The alleged shooter was apprehended within hours.

TAPS was quickly and safely shut down and the individual segments between the valves were isolated. As soon as the Alaska State Troopers apprehended the suspect, responders were allowed into the area.

JPO personnel representing several agencies (Bureau of Land Management, Alaska Department of Natural Resources, Environmental Protection Agency, US Department of Transportation/Office of Pipeline Safety, Alaska Department of Environmental Conservation, Alaska Department of Fish and Game, Department of Public Safety, and Alaska Department of Labor) had active response roles. Many were dispatched to

the site and Alyeska's emergency response center in Fairbanks where a Unified Command was established to manage the incident. Other JPO representatives remained on duty in the Anchorage office or later assigned to the Operations Control Center at the Valdez Marine Terminal to monitor pipeline restart.

This section of line was still under intense operating pressure even after isolation. The mist of oil created a potentially explosive atmosphere contributing to a dangerous work environment. Steps were taken early on to reduce the pressure and make the working environment safer prior to stopping the oil spray.

Simultaneously, oil on the ground was being vacuumed and transported to nearby Pump Station 7 where it was reinjected into TAPS, minimizing the affected area.

A variety of factors had to coincide before a hydraulic clamp, specially designed for incidents similar to this, could be placed on the puncture, including lowering pipeline pressure, removing pipeline insulation, assembling additional safety and fire personnel and equipment, and creating a safer working environment. Once achieved, a crane placed the clamp on the pipeline about 3:00 a.m. Saturday morning, successfully stopping the flow of oil 36 hours after the shooting. A permanent repair was completed early Sunday morning by installing a "thread-o-ring" and the pipeline was safely restarted at 3:24 a.m. Sunday.

A pump around skid (pictured) helped lower the pipeline pressure so the clamp could be applied. Oil from the damaged section of line was pumped around the valve and reinjected into the pipe upstream.

Governor Tony Knowles and several state and federal officials visited the site. Governor Knowles had high praise for industry and agency personnel involved in responding to this unfortunate incident.



The total spill volume was estimated at 285,600 gallons with approximately 176,000 gallons recovered.

Clean up continued through the summer of 2002. Environmental assessments and agency monitoring will continue for some time.

No water bodies were affected.

There were no reported injuries to humans or wildlife.

It cost \$20 million to clean up.

All of the agencies that responded to this incident participated in the development of an after-action report with Alyeska.

*The Joint After-Action Report for the TAPS Bullet Hold Response* was released in February 2002. Major aspects of the response were evaluated with the exception of TAPS Security addressed in a separate report by the State of Alaska Department of Military and Veterans Affairs. Observations and recommendations were offered in each section.

Several recommendations were made to search for ways to improve Alyeska's ability to stop high-pressure releases from the pipeline.

A major observation for the JPO is to ensure that the concerns and focus of the Bureau of Land Management's Authorized Officer (AO) and Alaska Department of Natural Resources State Pipeline Coordinator (SPC) are reflected throughout incident management. The AO and SPC focus on asset protection issues such as pipeline repair and return to service. The report included a recommendation to establish routine communications between the Unified Command and Authorized Officer and State Pipeline Coordinator. This will be incorporated into future drills.

Other observations recommended that lessons learned from this incident be incorporated into the TAPS Contingency Plans such as the pump around skid as a method of pressure reduction.

## **TAPS, Pipeline Oil Discharge Prevention and Contingency Plan**

The Pipeline Oil Discharge Prevention and Contingency Plan (C-Plan) addresses activities related to prevention, containment, and clean up of oil along TAPS. The Plan consists of six volumes: General Provisions and five regions specific plans for each geographic segment of the pipeline.

The Grant, the Lease, and Federal and State Statutes require oil spill plans. JPO agencies that administer these requirements are: the Alaska Department of Environmental Conservation (ADEC), Federal Bureau of Land Management (BLM), U.S. Department of Transportation, and Federal Environmental Protection Agency (EPA). Representatives from these agencies comprise the JPO Oil Spill Prevention, Preparedness, and Response Coordination Team. While the ADEC has the most prescriptive regulations, the other JPO agencies participate in the processes. ADEC issues a plan approval triennially and BLM issues a plan approval annually.

One of the JPO's first major projects after formation in 1990 was to substantially re-write the C-Plan through a combined effort with Alyeska as a result of the Exxon Valdez oil spill. In 1994, the plan was revised and approved in accordance with the Alaska's then newly promulgated oil pollution control statutes and regulations requiring triennial renewal of all contingency plans.

The C-Plan was significantly modified during the 1998 plan review, both in format and content because of changes in TAPS operations including the closure of four of the eleven pump stations and a change in Alyeska's organization. Plan approval was issued with twenty-two conditions to be completed within a time frame specified in the approval document. All conditions were complete by April 2001.

The next ADEC triennial plan review was in 2001. Public hearings were held in Glennallen and Fairbanks. The public comment period was extended to allow for the review of additional information submitted by the plan holder and to receive additional public comments as a result of the TAPS Milepost 400 bullet hole incident that occurred on October 4, 2001. Ten sets of comments were received.

The ADEC approved the C-Plan in November and a Findings Document and Response to Comments was released. Major improvements in this Plan related to response scenarios.

The JPO Oil Spill Team and Alyeska work to improve the C-Plan on an on-going basis. Joint agency and Alyeska field and tabletop exercises are performed annually.

The JPO Team routinely conducts unannounced inspections, surprise, and planned drills. At least once a year a mutual aid drill involves additional agencies and industry personnel.



**(45' response trailer)**

**This set of pictures was taken by the JPO Team at an exercise conducted at the Chatanika River on June 7, 2001. The scenario was a fuel spill from a truck that ran off the access road into a slough that connects from the access road to the Chatanika River.**

**Task force situated upstream of the TAPS crossing of the river**



**Task force located downstream of the TAPS crossing.**



The Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan underwent triennial public review in September 2002. Public hearings were held in Anchorage September 10 and in Valdez September 12, 2002.

## Alaska Native Utilization Agreement

Section 29 of the Federal Grant of Right-of-Way for TAPS makes specific provision for Alaska Native training, employment, and advancement.

For many years an agreement was in place between the Secretary of the Interior and Alyeska Pipeline Service Company to implement Section 29. As reported in JPO's Audit Report *Compliance and Effectiveness of Alyeska's Program to Implement the Alaska Native Utilization Agreement of October 20, 1995*, the agreement deteriorated over the years after TAPS construction. During the operational phase of the pipeline, Alyeska stated that their objective was to train and employ Alaska Natives so that within two years of start-up Alaska Natives would occupy a percentage of jobs at least equivalent to their proportionate share of the total population of the State of Alaska. That percentage was then estimated to be 20 percent. Alyeska subsequently revised the Plan of Action in 1976 to reduce the Alaska Native employment goal to 16 percent; however, this revision was never approved by the Department of Interior.

*Today, more than 572 Natives work on TAPS.*

*In 1993, 50 Alaska Natives worked for Alyeska. Today, there are 150 employees, a three-fold increase.*

*Alyeska must submit regular progress reports on this program to the Authorized Officer.*

*Alyeska awards app. \$170m/yearly to AK Native contractors.*

More than 5,770 individual Alaska Natives were ultimately hired to work on TAPS during construction in 15,047 different jobs. In the years following construction from 1978 through 1994, Alaska Native employment on TAPS slipped to less than five percent.

In 1994, increased JPO oversight of TAPS revealed the inadequate implementation of the agreement. The Authorized Officer and State Pipeline Coordinator requested Alyeska to provide the JPO with a plan to achieve full compliance with Section 29. They also recommended that Alyeska employ an Alaska Native full-time to revise and implement the plan.

BLM requested that the Alaska Federation of Natives participate in discussions with Alyeska to help reach an agreement acceptable to the Alaska Native community.

Following a series of meetings, the Department of Interior and Alyeska signed an Alaska Native Utilization Agreement in 1995.

Two subsequent Agreements were executed in 1998 and 2001.

Each Agreement established standards and goals. JPO routinely monitors compliance and has found that Alyeska's record of contracting with

Alaska Natives has been strong. Today there are more than 572 Natives working on TAPS either as Alyeska employees or Alyeska contractors.

The 2001 ANUA is an attachment to the FEIS and one of four ongoing initiatives in the FEIS, Section 4.8.4 Mitigation of Adverse Effects:

**Alaska Native Utilization Agreement.** Alyeska and contractors have met the successive interim employment goals of the last three ANUAs executed under Section 29 of the Federal Grant. There has been no cause for any BLM enforcement action related to recruiting or hiring of Alaska Natives. With Alaska Native employment expected to reach the 20% target by 2004, the monitoring focus will be on sustaining these employment percentage levels of Alaska Natives and maintaining compliance with future ANUAs. In this regard, the BLM will pursue formal processes within the next ANUA to promptly address any significant slippage in the percentage of Alaska Native employment.

## Authorizations and Permits

One of JPO's five main functions is to issue authorizations and permits necessary to operate and maintain TAPS and other oil and gas pipelines. Examples include authorizations for materials sales, temporary water use, fish habitat, solid waste, and air quality.

Authorizations for right-of-way leases are for pipeline projects including Badami, Alpine, Northstar, and Nuiqsut. Most recently, the State Pipeline Coordinator's Office (SPCO) issued a ROW lease for the Kenai-Kachemak gas pipeline. Discussions have also begun for the proposed Point Thomson pipeline project. ExxonMobil submitted an application for ROW early in 2003.

An important element of the lease permitting process occurs in the early stages of the project. The permits required and issuing agencies are identified, the process is outlined, and a draft project schedule is developed. This streamlining can save pipeline operators a considerable amount of time, effort, and project cost savings.

A ROW lease normally requires a minimum of 14 months to accomplish provided the application is complete and no major project changes arise. It is in the applicant's best interest to submit a complete application because major changes can substantially lengthen the processing time.

Pipeline operators are required to meet criteria established in ROW leases and comply with applicable laws or statutes in order to conduct their work. These requirements are considered during the review process.



Material sale contracts from existing mine sites can take 60 days to process, right-of-way amendments can take up to six months, and land use permits can take between one day and two months. State and federal processes vary. In an emergency, it is possible to expedite the permitting processes to effect repairs promptly.

**Milepost 110.5, Operation Material Site 119-4 near Slope Mountain. Material site inspections are conducted annually.**

Industry reimburses the agencies for their time and expenses to process applications and perform the necessary work to issue permits and authorizations. In some cases, Reimbursable Service Agreements are negotiated with agencies with expertise to perform certain functions, for instance, Department of Environmental Conservation for air and water quality.

## Kenai-Kachemak Pipeline Project

Marathon and UNOCAL formed a limited liability corporation, Kenai-Kachemak Pipeline (KKPL), LLC, to construct a common carrier pipeline to transport natural gas. The initial application proposed a 62-mile buried pipeline extending from the most northern point of Kenai near Kalifonsky Beach Road to the southern-most point in Anchor Point.

After review, the original application was found to be incomplete. Additional information was requested and received. The public was notified in April 2002.

The project was contingent upon discovery of adequate quantities of commercial gas in Anchor Point, Deep Creek, or South Ninilchik. When test wells in the Anchor Point area failed to find adequate supplies, the pipeline was shortened to approximately 32 miles connecting new gas discoveries to existing Alaska Pipeline Company and Marathon Cook Inlet gas pipeline infrastructure.

KKPL LLC submitted a revised application in May 2002.

The Division of Governmental Coordination initiated their Alaska Coastal Management Project review May 31 and issued the final determination July 23, 2002.

The *Commissioner's Analysis and Proposed Decision and Action* was signed October 9, 2002.

A public notice for the KKPL ROW Lease was published in October and public hearings were conducted in November.

The Lease was signed November 26, 2002 at a signing ceremony at the Anchorage Museum by (seated from left to right) Ben Schoffman, Project Manager for Marathon; Ron Kaltenbaugh, President of KKPL LLC representing Unocal; and Pat Pourchot, Commissioner, Department of Natural Resources.



### Right-of-Way Lease Renewals

The SPCO notified ConocoPhillips and BP that the ROW leases for the Kuparuk, Kuparuk Extension, Oliktok, Endicott, and Milne Point Pipelines would expire on May 2, 2004 unless renewed. State regulation 11 AAC80.065 requires that applications for renewal be filed two years prior to expiration.

Thirty-year ROW lease renewals were signed by the State for Kuparuk, Kuparuk Extension, Oliktok, Milne Point and Endicott Pipeline Systems on November 25, 2002 at a ceremony in the Anchorage Museum.

### Alpine

In 2001, the SPCO completed a variety of tasks associated with Alpine including:

- Provided letter of non-objection allowing the installation of infield pipelines from the Colville Delta satellite pad to the Alpine Central Processing Facility within the existing Alpine right-of-way.
- Reviewed and found adequate the wind induced vibration design.
- Submitted comments on the as-built drawings.
- Conducted inspections for compliance with the terms of the right-of-way lease, conditions, and stipulations.
- Reviewed the Surveillance and Monitoring Plan.
- Conducted extensive studies and found there are no stress or strain concerns on the pipe.
- Approved the temporary use of the Alpine diesel pipeline for transport of a hydro-treated light distillate used as a drilling mud additive to improve bore hole stability.
- Continued discussions on an erosion control plan for stabilization of the east bank of the Colville River.

**Alpine Pipeline at  
the Colville River  
transition area –  
vibration dampers**



In 2002, the SPCO completed a variety of tasks associated with Alpine including:

- Approved the temporary use of the diesel pipeline for the transportation of the product LVT 200 base oil.
- Reviewed and approved Surveillance and Monitoring Program revisions reflecting changes in frequency and manner of observations. SPCO recommended changes were annual monitoring of horizontal directional drilling end seals; annual surveillance of the Miluveach and Kachemach River vertical support members; and quarterly monitoring of the Colville River thermisters.
- Developed plans to address the erosion on the east bank of the Colville River.
- Approved discontinuance of monitoring the hydrotest seawater spill area.

## **Badami**

Badami continues to pose challenges for BP. Not only has it not produced as expected, other unanticipated challenges have had to be resolved. None of the issues resulted in oil spills or long-lasting environmental damage and they were quickly identified and resolved by the lessee. Some of the issues involved extensive review and careful planning prior to fixing.

- One example was review and on-site inspection of a restoration project performed on the west bank of the East Channel of the Sag River necessary due to erosion. Monitoring of the erosion control structure was added to BP's Surveillance and Monitoring Plan.
- SPCO requested an erosion prevention plan.
- Another issue dealt with plans to repair slipped vibration dampers. The dampers prevent wind-induced vibrations. The utility pipeline had experienced a circumferential crack in 2000 as a result of wind-induced vibrations. Top-of-pipe dampers were installed as remedy. The gas pipeline was examined, one weld anomaly was repaired and no cracks were found.
- A valve failure occurred in December. BP shut down the line and dispatched personnel via helicopters. One generator was running but not producing power and the stand-by unit was not working due to a faulty propane fuel gas supply regulator. It was repaired and the pipeline was restarted.
- There were discussions regarding repairs to seepage around a weir.
- BP requested and was granted deferral of the second geometry pig to determine the extent of thaw settlement in the buried river crossings until the third quarter 2002.
- SPCO conducted surveillances of compliance with the terms and conditions of the Lease. No major shortcomings were identified, however, it was noted that there had been a turnover of staff responsible for training and oversight of BP's contractors.

## Endicott

- SPCO received a revised 2000 annual report that reflected all surveillance and monitoring activities.
- Sixteen Vertical Support Members were found to have frost jacked beyond the allowable limits necessitating repairs.

**Endicott Pipeline With  
Vibration Dampers  
and Swans**



- SPCO conducted annual surveillances of compliance with the terms and conditions of the Lease. No major shortcomings were identified, however, a turnover in staff responsible for training and oversight of its contractors was noted.
- SPCO processed BP's request to renew the ROW lease.

- A revised Quality Program was received per Lease agreement.
- The North Slope Borough reviewed the proposed ROW lease renewal and found it consistent with their policy and the Alaska Coastal Management consistency review process.

## **Kuparuk**

- The US Department of Transportation/Office of Pipeline Safety reported that the aboveground corrosion areas identified in the 2000 pig run were addressed and sleeves were placed at each of those areas.
- SPCO processed Phillips request to renew the ROW lease.
- The North Slope Borough reviewed the proposed ROW lease renewal and found it consistent with their policy and the Alaska Coastal Management consistency review process.
- The leak detection system was tested and found to work very well.

## **Kuparuk Extension**

- SPCO reviewed and found acceptable Phillips' as-built drawing for the drag reducing skid and injection piping at Central Processing Facility 2.
- Phillips submitted a letter of non-objection for BP's request to install production, gas list, and water injection pipelines, a fiber optic cable, and two power cables across the Kuparuk Pipeline Company right-of-way.
- Phillips was requested to review the monument refurbishment procedures to ensure that all applicable requirements of ROW stipulation 1.13 are incorporated into their procedures for survey monument inspections and refurbishment work order.
- The leak detection system was tested and found to work very well.
- The North Slope Borough reviewed the proposed ROW lease renewal and found it consistent with their policy and the Alaska Coastal Management consistency review process.
- SPCO processed Phillips request to renew the ROW lease.

## **Liberty**

The SPCO reviewed and commented on reports including the Development and Production Plan, Oil Discharge Prevention and Oil Contingency Plan, and the Draft Environmental Impact Statement. The Final EIS was released in 2002. BP determined that the project was not

economically feasible and shelved it. They intend to reevaluate the development plan for the project that contains a number of scenarios ranging from moving the proposed development island to the construction of a drilling island with three-phase flow back to existing infrastructure.

## **Milne Point**

Enhanced Oil Recovery (EOR) Project –

- Approved the construction plan.

Crude Oil Line –

- Renewed the ROW lease.
- The North Slope Borough reviewed the proposed ROW lease renewal and found it consistent with their policy and the Alaska Coastal Management consistency review process.
- Coordinated the State of Alaska's review of the lease renewal for consistency with the Alaska Coastal Management Program.

EOR and Crude Lines –

- Approved revisions to BP's Surveillance and Monitoring Plan for the Oil and Products Pipelines.
- Conducted annual surveillances of compliance with the terms and conditions of the Lease. No major shortcomings were identified, however, it was noted that there had been a turnover in staff responsible for training and oversight of its contractors.
- Approved the transfer of OXY interest in the Milne Point Pipeline Company to BPTA and assignment of the Milne Point Pipeline ROW and Products ROW Lease from Milne Point Pipeline Company to Milne Point Pipeline LLC, a wholly owned subsidiary of BPTA. Also approved BP Corporation North America Inc. as the Guarantor of the ROW Leases releasing the Standard Oil Company from their Guaranty for Milne Point Pipeline Right-of-Way.

## **Northstar**

- Reviewed and accepted BP's Surveillance and Monitoring Plan.
- Approved BP's construction plan to backfill the pipeline trench to meet the six-foot depth of material over pipeline requirement.
- Approved BP's plan to install fiber optic cable.

- Reviewed BP's proposed temperature changes to reduce waxing in the oil pipeline.
- Granted an extension for right-of-way as-built surveys.
- Reviewed BP's Subsistence User and Public Safety Plan.



**Northstar Offshore  
Island in the  
Beaufort Sea**

- US DOT/Research and Special Programs Administration reviewed BP's revisions to the Facility Response Plan.
- DEC reviewed and approved the renewal plan for Northstar Operations Oil Discharge Prevention and Contingency Plan.

## **Nuiqsut**

- Approved the construction plan for the buried phase of the project. (state ownership of lands within this project is limited to the river crossing at the Nechelik channel of the Colville River.)
- The US Department of Transportation/Office of Pipeline Safety is overseeing the construction of the remainder of the pipeline largely on Kuupik lands. During surveillance they found that the pipeline coating had been damaged. They required the damage to be repaired. DOT reinspected after repairs were completed and prior to burial.

## **Oliktok**

- Conducted annual surveillances and no compliance issues were noted.
- Reviewed and approved Phillips design basis reflecting natural gas liquids service.

- Reviewed Phillips proposal to make modifications to a 6” line with Kuparuk/Oliktok Rights-of-Way.
- Reviewed project to install a 12” diameter produced water injection pipeline and a 10” diameter miscible injectant pipeline within the Kuparuk and Oliktok Pipeline ROWs to support the Eileen West End flood development project.
- The North Slope Borough reviewed the proposed ROW lease renewal and found it consistent with their policy and the Alaska Coastal Management consistency review process.

## **Point Thomson**

ExxonMobil submitted a ROW application for pipeline ROW Lease Point Thomson Gas Cycling Project Export Pipeline to the SPCO in July 2002. Discussions are underway with the agencies and an Environmental Impact Statement will be produced for the project.

Point Thomson is the second largest discovered gas field on the North Slope after Prudhoe Bay. It is estimated to hold eight trillion cubic feet of natural gas liquids and 400 million barrels of high-value condensate. The area is located about 30 miles east of Prudhoe Bay next to the Arctic National Wildlife Refuge and about 15 miles from the nearest infrastructure, Badami oil and utility pipelines.

At the State’s urging, ExxonMobil will need to drill several exploration and development wells by 2008 or forfeit millions of dollars and rights to thousands of acres.

Although this discovery was made in 1977, there are challenges associated with the project. The first one is that the natural gas is under high pressure. Because of this, the equipment and technology will be costly and complex. Second, transportation of large quantities of gas is a question mark. There is no gas line project at this time to move North Slope gas to market.

## 2001 – 2002 JPO Chronology of Major Activities

### 2001 - "Reviews for Renewal"

- Just like 2000 - of the 4,920 Audit Action Items (AAIs), two remained at the end of 2001. AAI 1955, Change Management was being reviewed for closure in 2002. A Memorandum of Understanding (MOU) for AAI 2076, Remote Gate Valve Upgrade was being developed.
- Minerals Management Service (MMS) requested membership in the JPO.
- MMS released the Draft Environmental Impact Statement for Liberty.
- The TAPS ROW Brushing Policy was jointly modified with Alyeska.
- Governor Knowles announced the establishment of a Gas Pipeline Cabinet and the State Pipeline Coordinator as the lead official for permitting, authorization, and oversight of gas pipelines. State Pipeline Coordinator, Bill Britt, became the Gas Pipeline Coordinator and established a Gas Pipeline Office apart from the JPO.
- John Kerrigan became the State Pipeline Director.
- Foothills Pipe Lines Ltd. requested that their ROW application be completed and a lease issued. Foothills shelved the project in 2002.
- The SPCO approved the construction plan for the buried phase of the Nuiqsut gas line project.
- JPO closed an Order to clean and inspect tanks and develop interim contingency measures at the VMT.
- The eighth, ninth, and tenth CMP reports were released. For the first time functional areas covered in prior CMP report were re-examined for operations, construction, and maintenance.
- The TAPS owners submitted applications to renew the Federal Grant and State Lease. A joint team was assembled to conduct the various processes for renewal.
- Argonne National Lab was contracted to prepare the EIS for the TAPS right-of-way renewal.
- A 60-day scoping period was provided in preparation of the EIS for renewal.
- Government to government meetings/briefings were conducted for renewal.
- JPO requested Alyeska to test their Earthquake Monitoring System.
- In 1996/97, JPO and Alyeska agreed to a schedule to test mainline valves for internal leak through. A Memorandum of Agreement (MOA) resulted. Several valves have been repaired or replaced as a direct result. The goals were met and the MOA closed. A plan for future testing and repairs is in place.

- Applications were submitted for renewal of the Pipeline ROW Leases for Kuparuk, Kuparuk Extension, Oliktok, Endicott, and Milne Point.
- JPO participated in Alyeska's large-scale contingency plan exercise June 27, 2001 (Lowe River Oil Spill Drill) in Valdez. Federal and state agencies, Alyeska staff from the interior of Alaska, Ship Escort and Response Vessel Service, Coast Guard, and City of Valdez representatives also participated.
- The oil spill contingency plan for TAPS was renewed for three years by the Alaska Department of Environmental Conservation and one year by the Bureau of Land Management.
- Discussions for the proposed Kenai Kachemak gas pipeline began.
- A bullet pierced TAPS Thursday, October 4 near Milepost 400. The pipeline was quickly and safety shut down and repaired. A joint agency and Alyeska "After Action Report" resulted with several recommendations for future improvements.
- In light of the September 11 terrorist attacks, additional safeguards were put in place for pipeline and energy facilities.
- Increased Grant and Lease Section and Stipulation compliance oversight activities were laid out in the 2001 Work Plan. Two major reports were to result: Compliance and Sustained Useful Life of TAPS. The Compliance report was issued in May 2002.

### **2002 - "Historical TAPS Right-of-Way Renewal Major Effort"**

- The renewal effort dominated the office.
- The Milepost 400 After Action Report was released in February. The jointly prepared report documented actions taken and recommendations for improvement.
- The Kenai-Kachemak Pipeline project was public noticed in April. The proposed pipeline was to extend 62 miles in length from Kenai to Anchor Point. Test well drilling later failed to locate adequate quantities of commercial gas in the Anchor Point area and the project was reduced to 32 miles extending only to Ninilchik.
- ADNR proposed regulation changes to allow the Commissioner to extend the time before a pipeline renewal administrative decision becomes final. This would provide an additional 90 days to fully consider comments if needed.
- The BLM office in Albuquerque office requested technical advice from the JPO on a pipeline ROW project.
- BLM conducted their annual review of the TAPS Oil Discharge Prevention and Contingency Plan and approved subject to conditions imposed by the Alaska Department of Environmental Conservation in their triennial approval issued in November 2001.

- JPO released the 11<sup>th</sup> Comprehensive Monitoring Program report examining Grant and Lease compliance.
- The 12<sup>th</sup> Comprehensive Monitoring Program report *TAPS Maintenance and Sustained Useful Life, January 2001-May 2002* was released in July.
- JPO monitored the annual maintenance shutdown including replacement of remote gate valve 39 in July.
- The SPCO received an Application for Pipeline ROW Lease for the Point Thomson Gas Cycling Project Export Pipeline from ExxonMobil Pipeline Company. A proposed 22-mile pipeline connecting to Badami.
- The Draft Environmental Impact Statement (DEIS) and the Department of Natural Resources Commissioner's Statement of Reasons and Proposed Written Determination were released July 5 for a 45-day review. Both products are major "firsts" in the history of the State and Nation due to the significant and controversial nature of TAPS.
- A number of environmental and Alaska Native groups submitted requests to extend the 45-day DEIS review period. The requests were reviewed but not granted.
- The Department of Public Safety prepared a technical paper on Alyeska's Fire Protection/Fire Safety Program covering in-depth looks at Alyeska's fire prevention efforts from April 2000 to August 2002.
- The public comment period to provide input on the DEIS and Commissioner's Statement of Reasons and Proposed Written Determination for renewal of the Trans-Alaska Pipeline System Right-of-Way ended August 20. Seven public hearings were conducted with 158 people either giving testimony or providing written comments. Approximately 300 additional submittals were received through the other means of providing comments.
- The comment period for the Commissioner's Statement of Reasons and Proposed Written Determination for renewal of the Endicott, Kuparuk, Kuparuk Extension, Oliktok, and Milne Point Pipelines Right-of-Way Leases ended August 22.
- Public hearings were held in Valdez and Anchorage for the Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan.
- A technical report was released on Stipulation 3.8 Glacier Surges covering the Black Rapids Glacier, Canwell Glacier, Castner Glacier, Fels Glacier, and Worthington Glacier.
- An assessment of Stipulation 3.6: Stream and Floodplain Crossings and Erosion was produced.
- The Division of Governmental Coordination (DGC) completed coordinating the State's review of existing Federal ROW Grant and State Lease renewal for the Trans-Alaska Pipeline System for consistency with the Alaska Coastal Management Program (ACMP) and developed a final consistency determination based on reviewers' comments. The State found the project consistent with the ACMP.

- A 7.9 earthquake hit interior Alaska November 3, 2002. Only minor damage occurred on TAPS – the system worked as intended and no oil spilled.
- The Department of Natural Resources Commissioner extended the administrative review period on TAPS renewal until November 29, 2002 to consider all the comments submitted.
- The Commissioner also extended the administrative review period for the five North Slope pipeline right-of-way leases up for renewal (Kuparuk, Kuparuk Extension, Oliktok, Milne Point, and Endicott) until November 29, 2002.
- The SPCO coordinated the State's reviews of pipeline ROW lease renewals for the Kuparuk, Kuparuk Extension, Oliktok, Milne Point and Endicott Pipeline Systems for consistency with the Alaska Coastal Management Program (ACMP). The SPCO developed final consistency determinations based on reviewers' comments and found the lease renewals consistent with the ACMP.
- Thirty-year ROW lease renewals were signed by the State for TAPS, Kuparuk, Kuparuk Extension, Oliktok, Milne Point and Endicott Pipeline Systems on November 25, 2002 at a ceremony in the Anchorage Museum.
- The Final Decision for the Kenai-Kachemak Pipeline ROW was signed November 25, 2002. The ROW Lease was signed on November 26, 2002.
- BLM announced availability of the Final Environmental Impact Statement November 29, 2002.
- The Federal Record of Decision was signed January 8, 2003.



**Grizzly bear near PS 3**

## 2003 JPO Work Program Goals

Monitor TAPS for compliance with the Federal Grant and State Lease and state and federal laws and regulations.

Continue to evaluate and seek to reduce risks to TAPS by understanding hardware condition, ensuring hardware and systems meet requirements, effective management controls, and effective failure planning and response.

Follow-up on Reliability Centered Maintenance audit and redesign verification. Apply risk-based methodology to identify failure management policies necessary to preserve the functions of critical TAPS systems.

Increase communication with stakeholders and conduct periodic meetings in various communities to discuss local concerns.

Follow through on FEIS Mitigating and Monitoring Measures including Employee Concerns Survey, Copper River Oil Spill Contingency Plan Review, Alaska Native Utilization Agreement revision, and programmatic agreement with the State Historic Preservation Office.

Follow through on commitments made in JPO/Alyeska Agreements.

Complete the Information Accountability Initiative. Develop a relational Database Management System to provide tracking, trending, and reporting on oversight activities; manage the workload generated by JPO's interagency structure; maintain case files; compile the main outputs of the JPO Comprehensive Monitoring Program; and maintain a web site for information distribution.

Conduct project oversight to validate project design, construction, and adherence to permitting requirements. A number of projects are pre-selected for oversight every year and included in the JPO work plan.

Monitor high-risk projects and activities to ensure that pipeline integrity, environmental protection, and public safety are achieved and maintained on TAPS.

Follow-up on the MP 400 Bullet Hole After Actions for completion.

Issue the required permits and authorizations to Alyeska and North Slope pipeline managers to operate and maintain pipelines.

Process the application for the Pt. Thomson Gas Cycling Project Export Pipeline received from ExxonMobil.

Review Yukon Pacific Corporation's request for right-of-way realignment.

Perform construction oversight then transition into operational oversight of the Kenai Kachemak Pipeline.

Process, negotiate, deliver, and administer Right-of-Way Leasing Act leases.

Complete housekeeping functions for TAPS and North Slope pipelines renewal including administrative record close-out.

Implement a Comprehensive Monitoring Program for North Slope pipelines.



**JPO surveillance conducted for compliance with Stipulation 1.12 - Regulation of Public Access August 28, 2001. (ANC-02-S-278) PLMP 586.9, access road.**

***Completion of this report fulfills annual reporting requirements. The State of Alaska Administrative Order 134 requires the State Pipeline Coordinator to submit an annual progress report to the Governor. Section 28 of the Federal Mineral Leasing Act requires the Secretary of Interior to submit an annual report to the House and Senate Committees of Interior and Insular Affairs.***