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BEFORE THE
HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

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Cleared
3:05 p.m.

July 14, 1993

Good afternoon Mr. Chairman, and members of the Subcommittee. I am pleased to appear before you today to testify on behalf of the Department of Transportation concerning important issues arising out of your investigation of government oversight of the Trans-Alaska Pipeline System (TAPS).

My testimony will demonstrate that the pipeline safety program of the Research and Special Programs Administration (RSPA), administered by the Office of Pipeline Safety (OPS), is providing, and will continue to provide, effective oversight of TAPS' operation, consistent with the agency's statutory authority and the available resources. Our responsibilities continue to evolve as recent mandates broaden the scope of OPS authority to include greater emphasis on the environment and on spill response.

The level of oversight OPS provides to TAPS is commensurate with Alaska's environmental sensitivity and TAPS' status as the major transporter of domestically produced crude oil. OPS therefore uses a two-pronged approach for carrying out its responsibilities

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regarding TAPS. We conduct, as part of our risk-based inspection plan, annual standard inspections of the entire system. In addition, in conjunction with the Joint Pipeline Office, we are leading an ongoing TAPS corrosion investigation. Our actions are intended to assure, and enforce when necessary, Alyeska's compliance with the pipeline safety regulations.

OPS Jurisdiction of TAPS

To help the subcommittee understand the federal and state jurisdiction over TAPS, I have included with this testimony an illustration delineating federal and state lands along the pipeline route, which fall under right-of-way agreements administered by the Department of the Interior's Bureau of Land Management (BLM) and the State of Alaska, respectively. Among the many reasons why TAPS is a unique system, one that is particularly relevant to the issues this hearing will explore is the fact that it is the only pipeline system created by federal statute. The Trans-Alaska Pipeline Authorization Act (TAPA) (Title II of P.L. 93-153) calls for a multi-agency approach, the effectiveness of which we will examine today.

Under its general statutory authority for pipelines, OPS has jurisdiction along the entire pipeline route, beginning at Pump Station 1 near the Prudhoe Bay oil fields and terminating

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approximately 800 miles south at the loading arms that supply the tankers at the Valdez terminal.

OPS regulations provide a framework for assuring public safety and environmental protection. They emphasize prevention of accidents and spills through application of design and construction standards, operational practices which maintain pipeline integrity, monitoring and leak detection systems, and emergency response procedures that mitigate consequences. In the case of TAPS, OPS places special emphasis on cathodic protection and corrosion monitoring because of Alyeska's discoveries of serious corrosion on the mainline and in some tanks.

OPS regulates transportation facilities on TAPS. These include the TAPS mainline and its extension through the Valdez Marine Terminal up to the tanker loading arms. These also include certain tanks and piping along the mainline that are used for pressure relief and for balancing mainline throughput.

In addition to its oversight of the transportation of crude oil by TAPS, OPS oversees the natural gas line that operates between Pump Stations 1 and 4, and which supplies fuel to power equipment at Pump Stations 1, 2, 3 and 4.

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As a JPO member since 1990, OPS participates in resolution of a broad spectrum of TAPS-related issues, but applies its compliance authority only to those matters which are subject to OPS jurisdiction. For example, OPS plays only a peripheral role in oversight of Alyeska's Quality Assurance/Quality Control (QA/QC) program, which was implemented in response to state and federal right-of-way requirements. Your committee has expressed concern about possible criminal activity on TAPS, such as intimidation of ^{or by?} QA/QC inspectors, investigation of private citizens, and falsification of records. To the extent the allegations concern OPS-related operational issues, OPS can draw on the Department of Transportation Inspector General. So far, allegations of criminal wrong-doing have been more appropriately handled by agencies other than the Department, such as the State of Alaska and the Department of Labor.

OPS Activities with respect to TAPS

As I mentioned earlier, OPS utilizes a two-tiered approach to oversight of TAPS. TAPS is subject to standard pipeline inspections similar to those conducted by OPS for any other jurisdictional operator in the United States. These inspections are largely independent of OPS's JPO activities. OPS's JPO activities have focused primarily on a comprehensive corrosion investigation. They have also included coordinated response to

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congressional concerns, whistleblower complaints, preliminary work on the Trans-Alaska Gas System, and other issues that cross jurisdictional boundaries.

1. Standard Inspections

The inspections that OPS performs on TAPS are intended to establish Alyeska's compliance with the pipeline safety regulations. Although most pipelines are inspected within a three to five year cycle, OPS conducts annual inspections of TAPS in acknowledgement of the pipeline's importance and Alaska's environmental sensitivity. The OPS inspector stationed in Alaska also follows up on any safety-related conditions reported by Alyeska throughout the year (99 have been reported since 1990). In most cases, instances of Alyeska noncompliance have been of a record-keeping or procedural nature and have not represented an imminent threat to pipeline integrity.

Of the four enforcement cases OPS has pursued against Alyeska, the most noteworthy followed the 1992 closure of a remote-operated gate valve (RGV) that resulted in an overpressure of the mainline. Alyeska has implemented measures to prevent a recurrence. The enforcement case is pending. However, there have been several instances on TAPS where these measures performed as intended and prevented a pipeline overpressurization.

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OPS is investigating, for possible enforcement action, the issue of "weeping cables", brought to our attention by your staff.

2. JPO Activities

Beyond the inspection and enforcement aspects of OPS oversight of TAPS are the oversight activities OPS performs in concert with the other JPO agencies and which focus on corrosion. Although the TAPS has never experienced a corrosion leak on the mainline and has experienced two minor leaks on tanks, both the mainline and tanks have experienced corrosion beyond that expected for a relatively new pipeline facility. Because TAPS corrosion is subject to oversight by more than one agency, the coordinated multi-agency investigative approach is essential. While compliance with individual agency stipulations and regulations must be maintained, directives to Alyeska are most effective when the agencies coordinate. Priorities and schedules of demands and requirements on Alyeska should be consistent.

The JPO Task Force operates under a work plan developed by the member agencies, which designates one or more lead agencies per work item. OPS is lead agency on work items addressing mainline cathodic protection, corrosion data analysis, anode connections, effectiveness of internal inspection devices ("pigs"), corrosion repair procedures, internal corrosion monitoring, relief systems, tank corrosion, and the condition of the natural gas pipeline

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between Pump Stations 1 and 4. The JPO has issued two reports addressing work items for which OPS had the lead role: mainline cathodic protection and tank corrosion. Although the reports identify apparent noncompliances with pipeline safety regulations, OPS is suspending enforcement action while Alyeska demonstrates a good faith effort to comply with the reports' recommendations. OPS has assembled an internal cross-regional team comprised of staff members best suited to monitor Alyeska's follow-up activities. OPS is satisfied with Alyeska's progress and future planned actions.

As mentioned earlier, OPS uses the JPO to coordinate response to congressional concerns and whistleblower complaints. The member agencies jointly assign follow-up activities to one another, based on their relevant authorities. OPS follow-up activities have been or are:

- (1) Tank inspections: The JPO tank report, issued April 1992, specified appropriate tank inspection activities.
- (2) The use of uncertified materials: The OPS inspector sampled hundreds of material certifications and found no evidence of a problem. *If uncertified, no certification*
- (3) Falsified procedures for nondestructive evaluation of welds: BLM and OPS determined that the repairs and nondestructive evaluation of welds were completed in a satisfactory manner.

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- (4) Corrosion inspection and repair: OPS requested but did not receive additional information from the whistleblower.
- (5) Pressure testing: OPS requested but did not receive additional information from the whistleblower.
- (6) "Weeping" cables: OPS is investigating.

3. **Response to General Accounting Office (GAO) Concerns**

OPS is also following-up on all recommendations from the GAO report on oversight of TAPS, issued in July, 1991:

- (1) Cathodic protection: OPS was the lead agency on a JPO report recommending that Alyeska upgrade its cathodic protection monitoring procedures to meet pipeline safety regulations and industry standard. Alyeska is complying in accordance with a plan-of-action approved by the JPO.
- (2) Detection of internal and external corrosion on the mainline and at Valdez: OPS was the lead agency on a JPO report recommending upgrades to corrosion protection of TAPS tanks, including the storage tanks at Valdez. OPS is the lead agency on a JPO report, now under development, assessing the effectiveness of the internal inspection device ("pig") used to detect external corrosion on the mainline.
- (3) Testing of leak detection system: The leak detection system

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was tested in 1991 and 1992. OPS is satisfied that the leak detection sensitivity meets operating requirements.

- (4) Assuring that JPO oversight is systematic, disciplined, and coordinated with central leadership: The JPO rotates the leadership role on an issue-by-issue basis. This mode of operation enables the JPO to most effectively leverage the differing missions, perspectives, capabilities, and resources of its member agencies to achieve more timely response from Alyeska.

Ongoing/Future Initiatives

In addition to its ongoing inspection and investigative efforts, OPS is implementing regulations mandated by the Oil Pollution Act of 1990 that address response planning in areas of environmental importance. Alyeska has submitted its response plan to OPS, and has certified the existence of adequate response personnel to respond to a worst case discharge on TAPS. OPS review of this plan will be two-stage: the first stage for compliance with regulatory requirements, the second for potential improvements.

There are two areas of research which RSPA has planned for next year which would directly benefit our oversight of TAPS. In the President's budget for fiscal year 1994, funding is requested to

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identify Supervisory Control and Data Acquisition (SCADA)-based leak detection systems which can be installed on hazardous liquid pipelines to more quickly identify, size, and locate leaks. OPS plans to evaluate the sensitivity and reliability of the systems. Other activities planned include assessing computer models of pipelines which simulate pipeline leaks, and the appropriate response to them. Finally, OPS will develop a model to produce an overall assessment of SCADA systems and leak-detection subsystem requirements.

Secondly, to improve our knowledge concerning the cathodic protection of breakout tanks, funding is requested to survey industry to examine techniques for electrical inspection of cathodically unprotected breakout tanks (both full and empty), to locate possible corrosion of the tank bottom. The survey will also examine designs for retrofitting cathodic protection systems to breakout tanks following use of the electrical inspection techniques recommended in American Petroleum Institute (API) Recommended Practice 651.

During fiscal year 1993, RSPA has been active in the establishment of a Presidential Task Force to conduct an independent audit of the Trans-Alaska Pipeline System (TAPS). This Task Force is required to be established under Title VIII of the Oil Pollution Act of 1990 (Pub.L. 101-380). Among the

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purposes of the Presidential Task Force are determining 1) whether Alyeska has complied with all Federal and State laws, regulations and agreements; 2) whether the laws and regulations are sufficient to prevent accidental spills and environmental damage; and 3) whether improvements are necessary in the onshore pollution response capabilities and security for the TAPS.

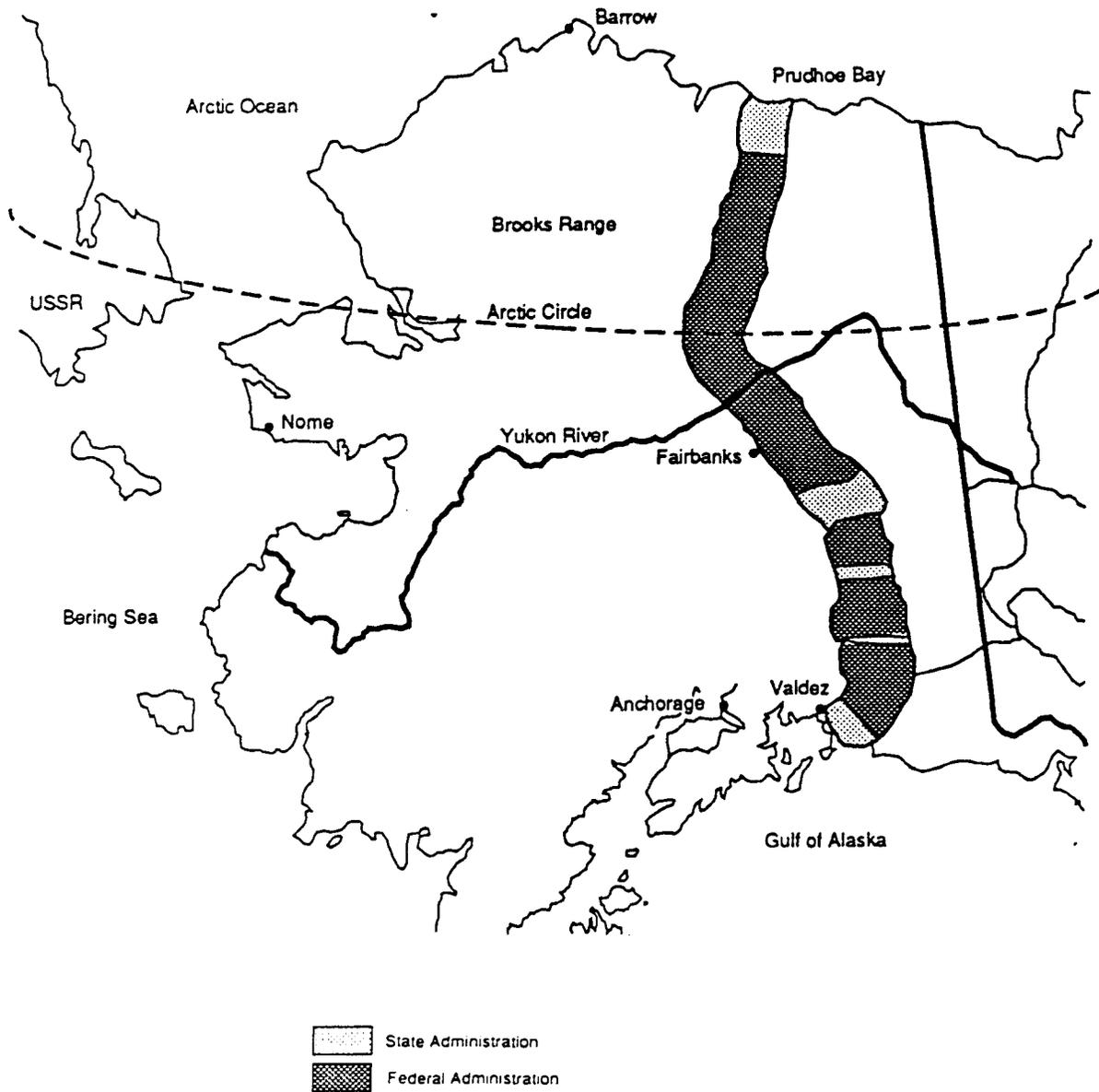
The Office of Pipeline Safety expects to provide whatever information is necessary for the Task Force to complete its assessment and will look forward to any recommendations resulting from the completion of that effort.

Like the other witnesses testifying today, the Department of Transportation is very concerned about the continued safe operation of TAPS. Toward this end, we will continue to view our oversight of TAPS as one of our most important responsibilities.

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Chapter 1
Introduction

Figure 1.1: Federal and State Administrative Authority of TAPS' Right-of-Way



Source: BLM and GAO