North Slope Spill Analysis
Project Description
March 2010

The North Slope Spill Analysis will investigate risks to Alaska's crude oil infrastructure by identifying available spill data, identifying causal factors, and analyzing the role of age-related factors in causing spills from crude oil infrastructure on the North Slope. This methodology will provide answers to the following questions by analyzing data about oil spills from North Slope pipeline infrastructure:

- What are the causal factors that have contributed to spills from North Slope crude oil production pipeline infrastructure?
- Do the causal factors contributing most significantly to spills appear to be associated with infrastructure aging?
- Are there statistically significant differences in causal factors or spill characteristics based on infrastructure characteristics?
- Does spill cause data show significant trends over time that can be related to infrastructure characteristics?
- What mitigation measures might prevent future spills from the North Slope crude oil production pipeline infrastructure?

Project Work Plan for North Slope Spill Analysis
The North Slope Spill Analysis will be completed by June 30, 2010. Following are the key steps in the analysis:

North Slope Pipeline Spill Analysis & Mitigation Measure Recommendations

- Analyze data on North Slope production facility piping spills to identify trends, clusters, and correlations among causal factors, infrastructure characteristics, and spill characteristics.
- Develop recommendations for mitigation measures to address common causal factors.
- Augment the existing ADEC SPILLS dataset with additional facility and spill cause information for piping spills from North Slope oil production facilities.

Evaluate Risk Management Alternatives

- Recommend approaches for the State to develop a risk management program for oil and gas production.

ARA Phase I Summary Report

- Document the initial effort to conduct a quantitative risk assessment.