Alaska's Risk Assessment of Oil and Gas Infrastructure

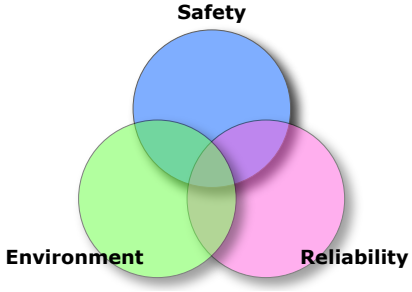
PROJECT STATUS

July 28, 2008

The **Alaska Risk Assessment** project is a comprehensive, engineering-oriented assessment of the status of the existing infrastructure, components, and systems of, or hazards to, Alaska's oil and gas infrastructure. It will result in the identification and ranking of risks based on consequences to safety and the environment, and recommendations for mitigation measures.

Purpose of the Risk Assessment

The purpose of the risk assessment is to determine the baseline condition of Alaska's oil and gas production, storage and transportation system, to evaluate the economic, environmental and safety risks associated with continued operation for another generation, and to recommend measures to mitigate those risks.



Objectives

- Identify safety, environmental, and operational risks,
- Quantify and rigorously evaluate those risks, and
- Recommend measures to mitigate or manage those risks.

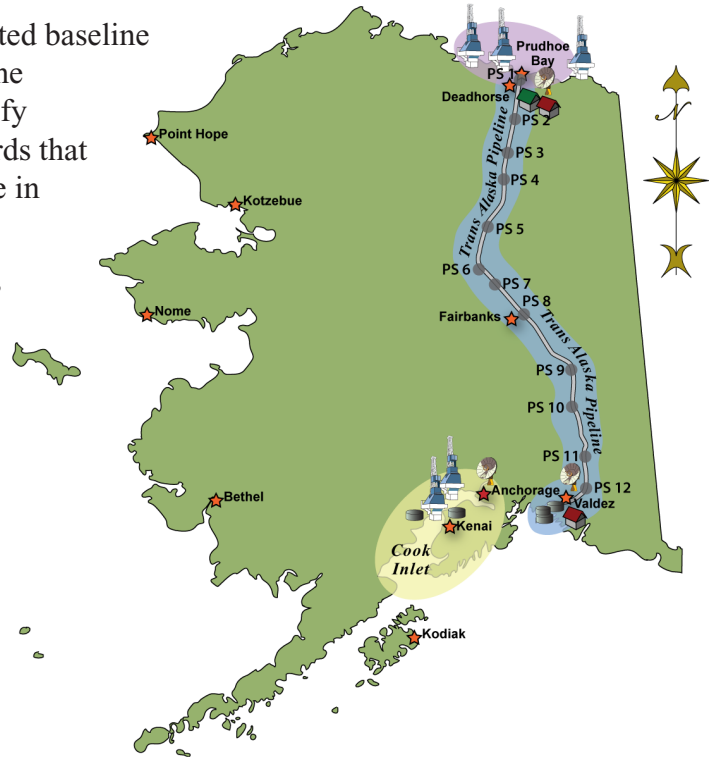
What Is Involved In the Risk Assessment

What is risk? Risk can be described as a function of the probability of an event occurring and the consequences of that event. Risk assessments are a systematic, analytical process, in which potential hazardous events associated with an operation are identified, their frequency of occurrence is estimated, and the consequences of potential adverse events are determined.

The risk assessment will be a one-time engineering oriented baseline analysis involving a thorough, independent appraisal of the condition of the petroleum infrastructure. This will identify those infrastructure items, components, systems, or hazards that have the greatest consequences and probability for failure in environmental, economic and safety terms.

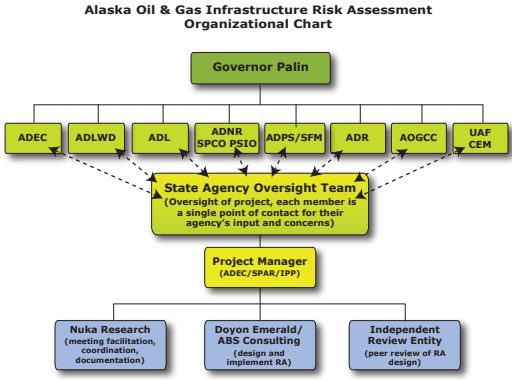
This risk assessment will include the production, storage, and transportation of crude oil and natural gas within the state.

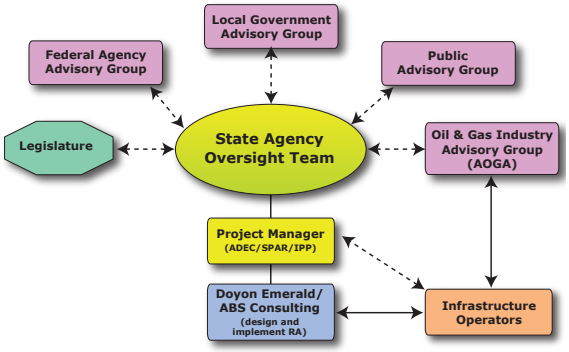
The risk assessment is intended to include the North Slope and Cook Inlet oil field infrastructure, the Trans Alaska Pipeline System and the Valdez Terminal. It will not include marine transportation. A risk assessment was completed by the state, USCG and shippers for crude oil transportation in Prince William Sound in 1997. A separate risk assessment is also being planned for crude oil transportation in Cook Inlet.



Who's Involved

The following organizational charts illustrate the groups involved in this project. The left hand chart shows the administrative organization of the project. The right hand chart depicts external communication links – stakeholder and infrastructure operator involvement.



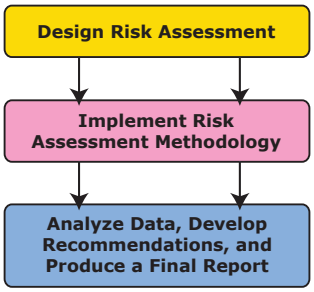


The Department has contracted with the expert firms of Emerald Consulting Group LLC (Emerald) and their subcontractor ABS Consulting Inc. (ABS Consulting) to conduct the Alaska Risk Assessment. Emerald is an Anchorage-based engineering company with extensive experience in risk assessment, process safety management, and integrity evaluation. Emerald personnel have an in-depth knowledge of the Alaska oil and gas infrastructure and associated operating companies. ABS Consulting is a wholly-owned affiliate of the American Bureau of Shipping that provides risk management services to public and private organizations around the world.

How the Risk Assessment will be Accomplished

The risk assessment will have three distinct phases. The first phase consists of development of the risk assessment design. The second phase consists of performing the risk assessment. The third phase consists of analyzing the results and reporting recommendations for risk reduction or risk mitigation to the state.

Risk Assessment Process



The Proposed Schedule

Project team members have developed an aggressive schedule for this project:

STATE OF ALASKA OIL & GAS INFRASTRUCTURE RISK ASSESSMENT	DURATION (in months)	START	FINISH
	22.14	Tue 6/24/08	Wed 5/26/10
CONTRACT SIGNING	0 days	Tue 6/24/08	Tue 6/24/08
PHASE I: DESIGN RISK ASSESSMENT (RA) METHODOLOGY	13.5	Wed 6/25/08	Tue 8/25/09
Task 1a - Project Plan	1.14	Wed 6/25/08	Tue 7/29/08
Task 1b - Stakeholder Consulation	4.55	Wed 6/25/08	Tue 11/11/08
Task 1c - Existing Data/Information Review	3.41	Wed 7/30/08	Tue 11/11/08
Task 1d - Interim Report	1.25	Wed 11/12/08	Fri 12/19/08
Task 2 - Proposed RA Design	4.55	Wed 10/8/08	Fri 3/6/09
Task 3 - Evaluate RA Design	4.09	Mon 3/9/09	Fri 7/10/09
Task 4 - Proposed Final RA Design	1.14	Tue 7/6/09	Fri 8/7/09
Task 5 - Final RA Design	.55	Mon 8/10/09	Tue 8/25/09
PHASE 2: IMPLEMENT RA METHODOLOGY	5.23	Wed 8/26/09	Thu 2/11/10
Task 6 - Implement RA	5.23	Wed 8/26/09	Thu 2/11/10
PHASE 3: ANALYSIS, RECOMMENDATIONS, AND REPORT	3.23	Fri 2/12/10	Fri 5/21/10
Task 7 - Produce Draft Report	2.73	Fri 2/12/10	Thu 5/6/10
Task 8 - Produce Final Report & Presentation	0.73	Fri 4/30/10	Fri 5/21/10
PROJECT COMPLETE	0 days	Wed 5/26/10	Wed 5/26/10