



Alaska's Risk Assessment of Oil and Gas Infrastructure



Welcome to today's briefing about the Alaska Risk Assessment project.

[Speaker and any other key DEC staff introductions.]

We are pleased to have this opportunity to present the project to this group of [federal agency representatives/industry operators/the public] as you are obviously among the key stakeholders in this process.

Safety Moment - exits; fire alarm rendezvous; etc.

[Note attendee list circulating, notes being taken, and any other meeting logistics not yet addressed.]



Overview



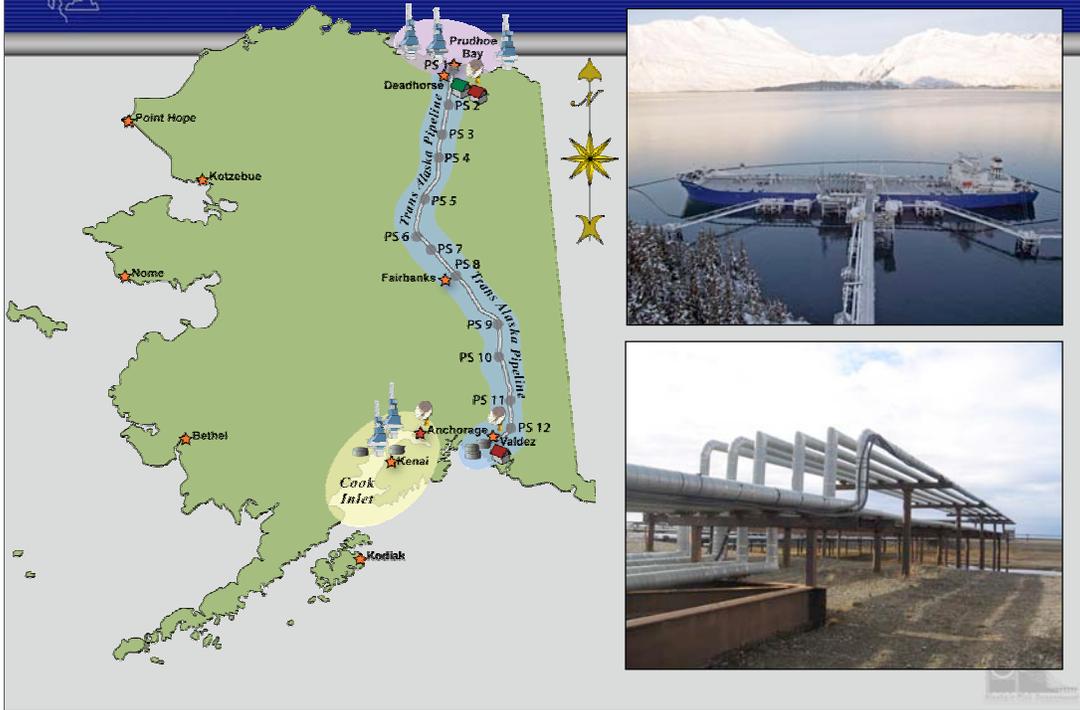
- Background
- Acquire Contractor
- Design Risk Assessment
- Implement Risk Assessment
- Report with Recommendations



This is an outline of today's presentation.

After discussing the background of the project in general, we will describe the risk assessment project's process, starting with procuring a risk assessment contractor and ending with that contractor's report. We'll be happy to take your questions at the end.

[Or, welcome questions during the presentation, if that is the presenter's preference.]



There has been a strategic decision made that Alaska's oil and gas infrastructure can and should operate for another generation, thus continuing to deliver its benefits to the state's economy and the nation's energy needs. However, as we all know, it is a complex system in terms of technology and engineering, but also management and oversight.

The ARA project will be a comprehensive, engineering-oriented assessment of the status of the existing infrastructure, components, systems, or hazards. It will result in the identification and ranking of risks based on consequences to State revenue, safety, and the environment, and recommendations for mitigation measures. We'll discuss the system components that will be included later; as indicated on this slide, we anticipate that North Slope, TAPS, and Cook Inlet infrastructure will be considered.

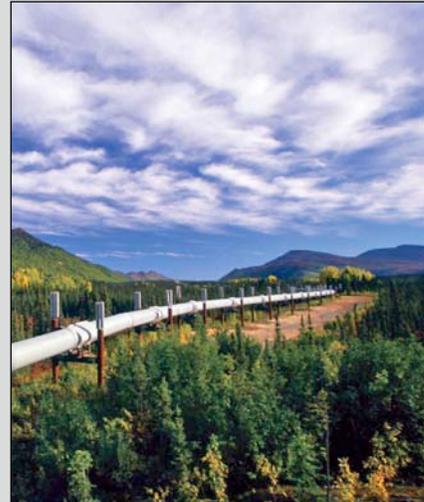
This project is a priority of Governor Palin's administration and will be conducted on an aggressive time schedule.



Goal

Background

To provide State agencies with information necessary to oversee the steady flow of oil and gas while protecting the public's safety and the environment.



Multiple state agencies—as well as federal agencies—are mandated to oversee the steady flow of oil and gas through Alaska's infrastructure while protecting public safety and the environment.

This project will provide the agencies—and the operators—with information to help them achieve their mandates. The recommendations made by the risk assessment contractor will be taken into careful consideration and used to develop or improve policies and programs.



Objectives



- Assess current state of infrastructure & systems in place to operate it
- Identify and rank areas of greatest risk
- Recommend risk mitigation measures



With this overarching goal in mind, we can focus in on the three objectives of the Alaska Risk Assessment project:

[Read from slide]

These objectives also loosely describe the process that will be undertaken by the risk assessment contractor.



Guiding Principles



- The outcome will be meaningful.
- The risk assessment is not an investigation or enforcement action.
- The results of the risk assessment will be useful to both the state and industry.
- Stakeholder input will be actively sought and incorporated.
- The risk assessment will be conducted in cooperation with infrastructure owners.
- The risk assessment will provide a baseline for ongoing monitoring.
- The risk assessment will provide a benchmark for the DNR Petroleum Systems Integrity Office.



The ARA will be guided by the principles you see here, which specify that:

- the outcome of the project will be meaningful, and not only to the agencies but industry as well
- stakeholder input will be sought actively, including coordination with industry
- the information gained on the state of the infrastructure will serve as a baseline for oversight agencies, in particular the Petroleum Systems Integrity Office.

Also, it is important to note that this risk assessment is not an enforcement or regulatory action in and of itself.

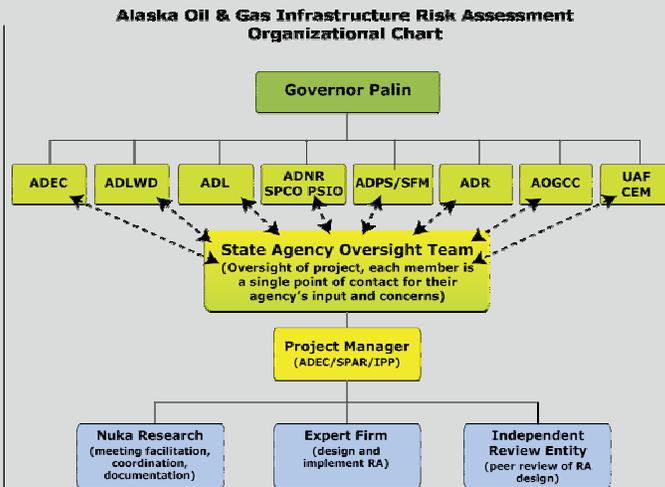


Roles

Background

State Agency Oversight Team:

- Alaska Department of Environmental Conservation (ADEC)
- Alaska Department of Labor and Workforce Development (ADLWD)
- Alaska Department of Law (ADL)
- Alaska Department of Natural Resources (ADNR)
 - State Pipeline Coordinator's Office (SPCO)
 - Petroleum Systems Integrity Office (PSIO)
- Alaska Department of Public Safety, State Fire Marshall (ADPS/SFM)
- Alaska Department of Revenue (ADR)
- Alaska Oil & Gas Conservation Commission (AOGCC)
- University of Alaska Fairbanks, College of Engineering and Mines (UAF/CEM)



Governor Palin's administration, has tasked the Commissioners of the relevant state agencies with oversight responsibility for the project as it relates to the interests and responsibilities of the State. The **State Agency Oversight Team** has primary responsibility for project oversight. The Team consists of one point of contact from each participating agency and one or more designated substitutes. The participating agencies are:

- Alaska Department of Environmental Conservation
- Alaska Department of Labor and Workforce Development
- Alaska Department of Law
- Alaska Department of Natural Resources (), including State Pipeline Coordinator's Office and Petroleum Systems Integrity Office
- Alaska Department of Public Safety, State Fire Marshall's Office
- Alaska Department of Revenue
- Alaska Oil and Gas Conservation Commission
- University of Alaska Fairbanks, College of Engineering and Mines

Team members not only bring their agency's interests and concerns to the project, but communicate the projects' purpose, progress, milestones, and outcomes back to the relevant individuals in their agencies. The team will provide guidance and direction to the Project Manager.

Betty Schorr of the ADEC Division of Spill Prevention and Response, Industry Preparedness will be the Project Manager.

The contractors for this project will include:

- an Expert Firm, or team of firms, to design and implement the risk assessment;
- a group that will provide a high level independent review of the study design; and
- Nuka Research, who has been assisting us with coordination and facilitation.



The State recognizes the need for transparency and good communications throughout this project, and believes the project will be more successful if it considers the interests of wide-ranging stakeholders at the front end.

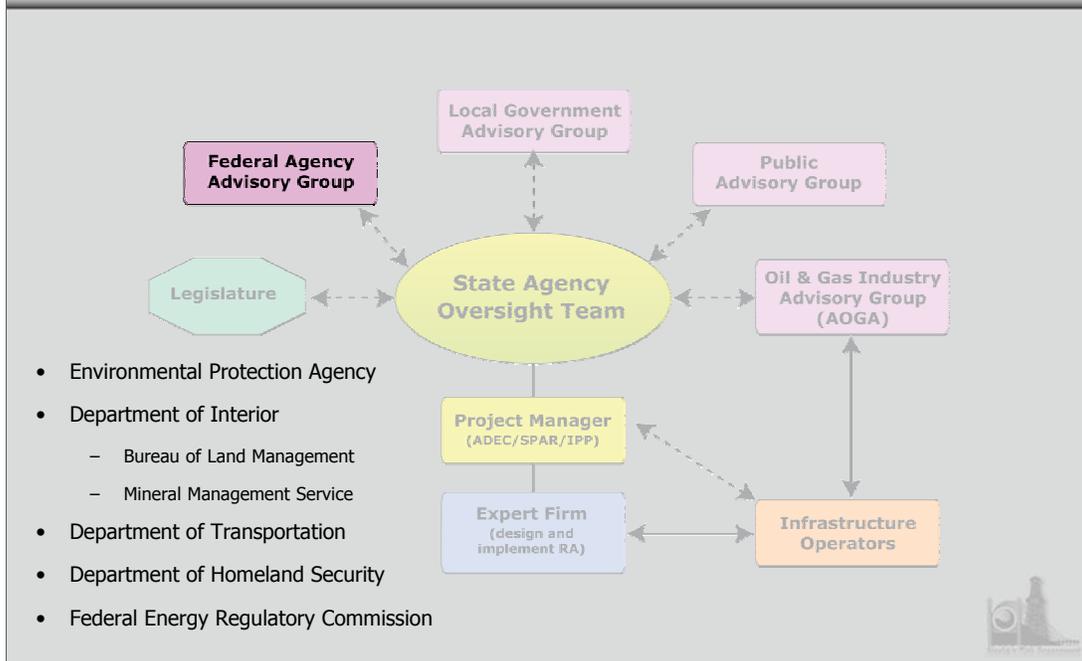
The ADEC Commissioner will provide a **Legislative Liaison** to communicate project progress to the Legislature throughout the project.

We propose the following additional Advisory Groups to provide channels for 2-way communication between the State Agency Oversight Group and stakeholder groups, each of which I will describe in more detail. We'd like your input on whether you think this will be feasible and efficient.

I'd like to make clear that these groups would serve only for the purposes and duration of the ARA project.



Roles - Federal Agency



The relevant federal agencies have an interest in the Alaska Risk Assessment and valuable inputs and recommendations. They may also hold data necessary to conduct the risk assessment. We have identified the following relevant federal agencies:

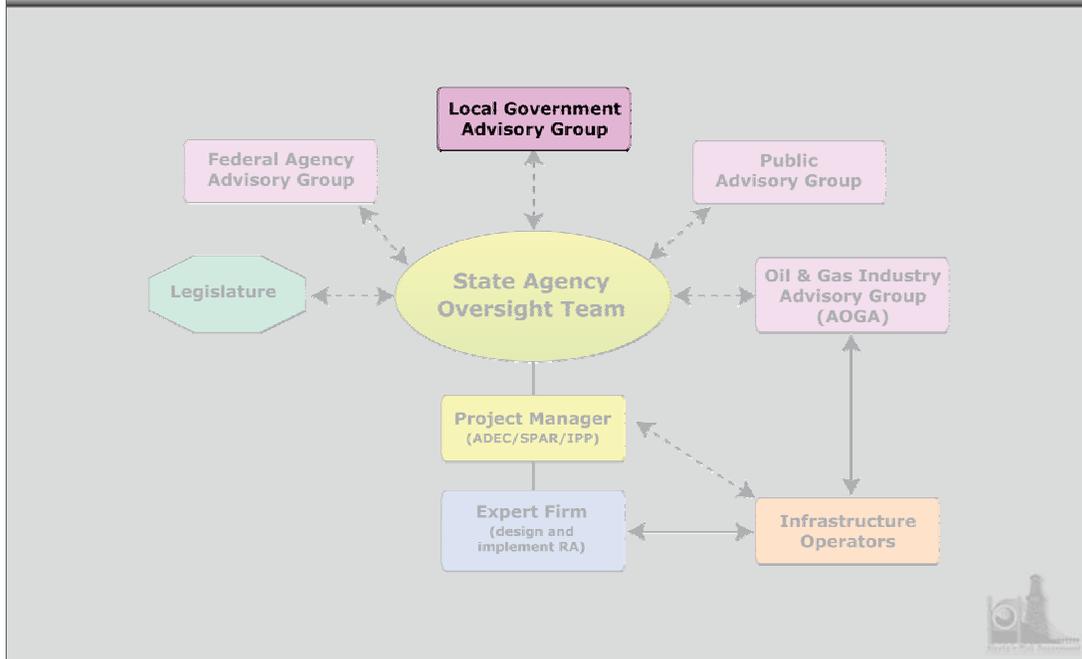
- Environmental Protection Agency
- Department of Interior
 - Bureau of Land Management
 - Minerals Management Service
- Department of Transportation
- U.S. Coast Guard
- Federal Energy Regulatory Commission

We are requesting that these agencies identify a single point of contact to participate in the oversight team meetings and coordinate federal concerns. We think that this coordination take place through the State Pipeline Office.



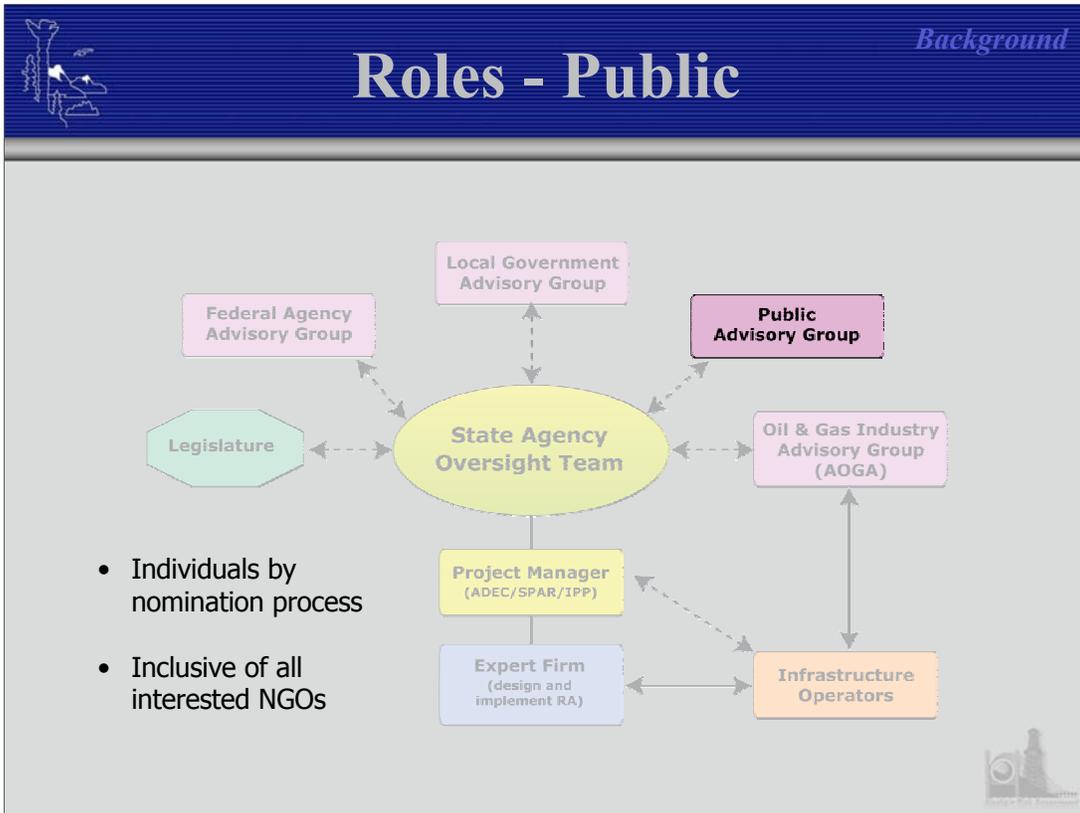
Roles - Local Government

Background



The SAOT proposes a Local Government Advisory Group consisting of one representative from the local governments with oil and gas infrastructure within their jurisdiction. This would likely also include any tribes interested in participating.

The purpose of this group is to incorporate local government suggestions and concerns to the SAOT, and to keep these communities directly informed throughout the process. The boroughs will be asked to coordinate the concerns and interests of cities within their boundaries.



We are also proposing a Public Advisory Group to incorporate public interests represented both by organized groups and individual Alaskans.

We will actively seek Alaskans with applicable knowledge and experience willing to contribute to the project by serving on this group. All organizations and individuals that want to be involved will be included, including individuals and native corporations owning land with infrastructure on it.

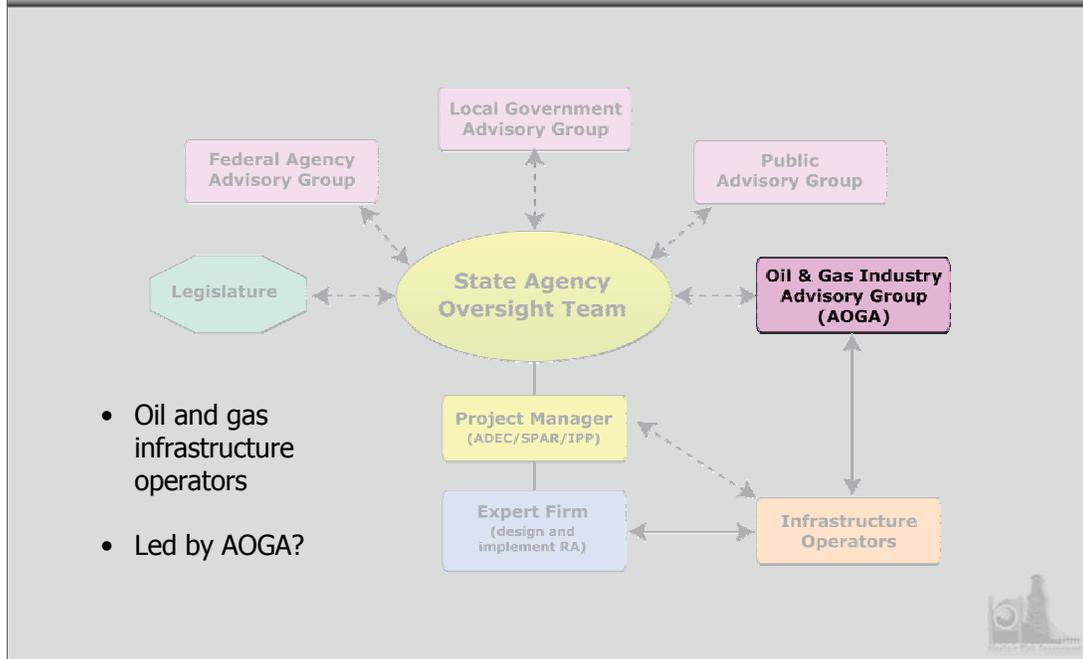
We envision that this group will:

- Appoint a spokesperson to sit in on SAOT meetings
- Be briefed on the project goals, objectives, schedule, progress, and status
- Discuss issues and recommendations
- Provide constructive input specific to the project



Roles - Oil & Gas Industry

Background

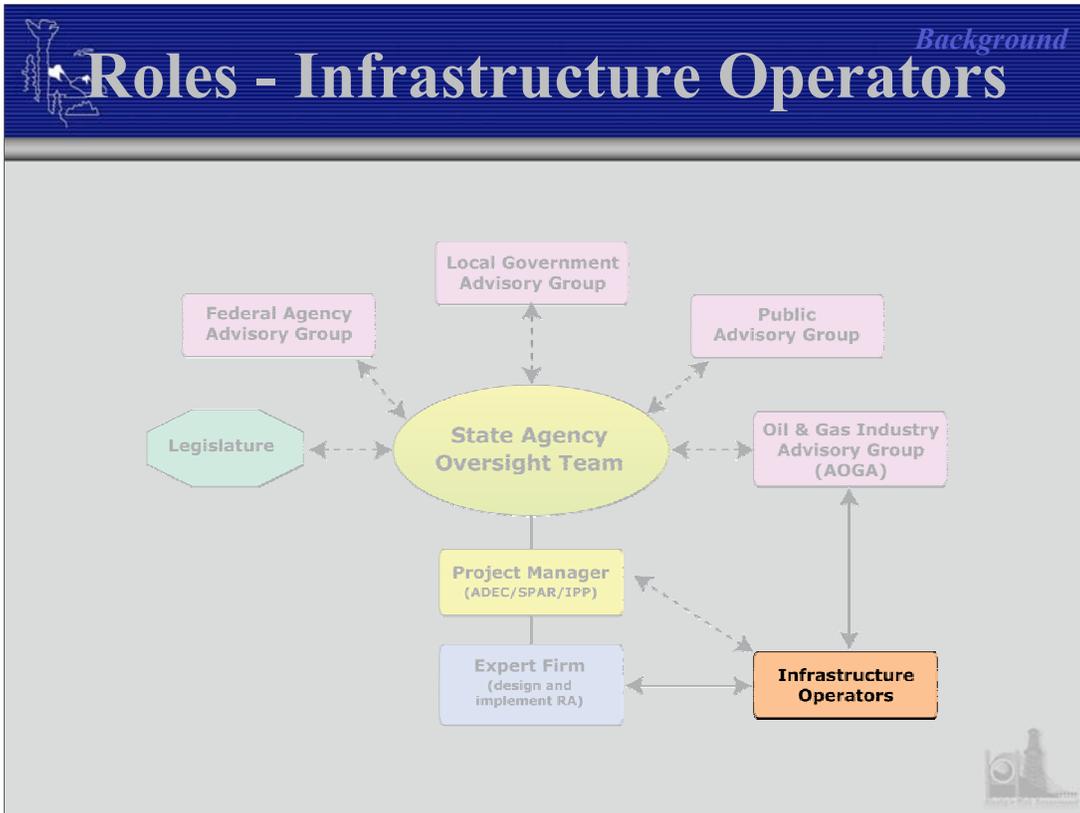


The State also proposes that the Alaska Oil and Gas Association facilitate the communication with the oil and gas industry.

AOGA would serve as the primary liaison to the oversight team for suggestions and concerns and keeping oil and gas companies informed throughout the project. It is proposed that AOGA would:

- Sit in on SAOT meetings,
- Coordinate all industry input to the SAOT, and

Communicate project goals, objectives, schedule, progress, and status back to infrastructure operators and other oil and gas companies.



The Infrastructure Operators are the individual companies that operate oil and gas infrastructure in Alaska.

Infrastructure Operators hold key information, including details and data about the engineering, history, and management of their systems. We hope to work with infrastructure operating companies to establish permission and protocols for data exchange between the operators and Expert Firm. These protocols will serve to define and protect proprietary data. Information that is already in the public domain will be shared with everyone; other information may be disclosed only at the discretion of each operating company.

The protocols will also serve to clarify facility access by the contractor. Exactly how this will be done is a topic for the Oil and Gas Industry Advisory group.



Contract with Expert Firm

- RFP developed by ADEC with input from State Agency Oversight Team
- RFP issued - March 14, 2008
- Pre-proposal Conference - April 7, 2008
- Final Day to Submit Proposals - April 28, 2008
- Notice of Intent to Award - May 19, 2008
- Contract Start - June 4, 2008



Now we get to the process that is already underway and which will carry us to the end of the project in 2010.

On behalf of the State Agency Oversight Team, DEC is in the process of procuring the services of an expert risk assessment firm to design and implement the actual assessment.

[Review time-line for procurement on slide.]

The preference for an Alaskan firm is built into the evaluation criteria.

We recognize that this is a tight turnaround time, both for interested bidders and for our evaluation of the proposals. In addition to the normal state procurement channels, we identified over 20 firms that we believed to have the necessary set of skills and sent the RFP to them directly.



Overview of Process

- Conducted in 3 phases
- State can opt out of contract after Phase 1

Risk Assessment Process



The RFP asks bidders to propose a specific risk assessment process, but we envision that process looking something like the flow chart you see here. We'll go through each of the three phases of the project in more detail in a moment, but it is important to note that DEC will have the option to opt out of the contract if we are not satisfied with the services provided for phase 1.



Overview of Phase 1

- Develop and Finalize a Project Plan
- Consult with Stakeholders
- Review Existing Data
- Develop Interim Report
- Proposed Risk Assessment Design
- Public and Peer Review of Design
- Final Risk Assessment Design



We feel strongly that the success of the whole project depends on the results of phase 1. During this phase, the contractor will determine the precise scope and design of the assessment. They will do this with extensive input via the State Agency Oversight Team.

The project design that they propose will undergo a rigorous review by government and industry, as well as a high level independent peer review and the public.

The “public” here is most likely going to mean a few especially interested local governments and environmental groups, but the briefings conducted at this stage will be open to all.



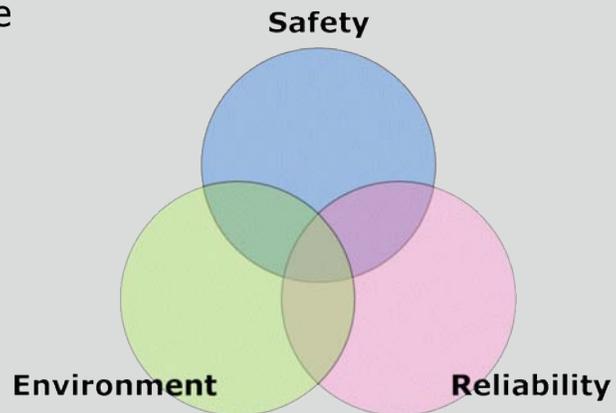
We have recommended in the RFP that the risk assessment contractor use a “system of systems” methodology that starts by asking “what is an unacceptable consequence” and working backwards from those unacceptable consequences to identify the primary, secondary, and tertiary factors that could cause them.

This methodology is used by NASA, and we think it is appropriate for the complexity of Alaska’s oil and gas infrastructure system.



Three Filters

Safety: unacceptable consequences to the safety of life and health of both the general public and industry employees.



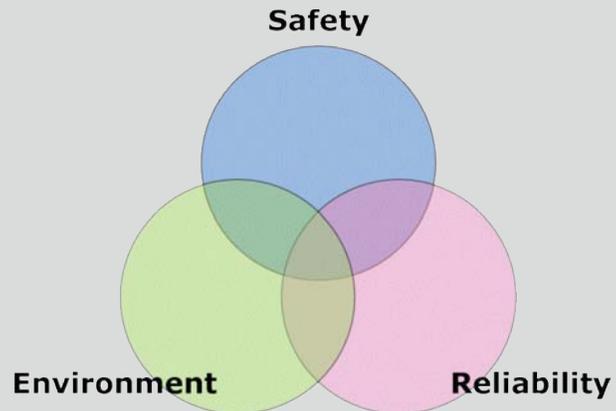
We ask the contractor to work with us to define “unacceptable consequences” in terms of three filters: environment, safety, and reliability.

For this purpose, we think of safety in terms of the life and health of both the general public and industry workers.



Three Filters

Environment:
unacceptable
consequences to the
natural resources of
the State.

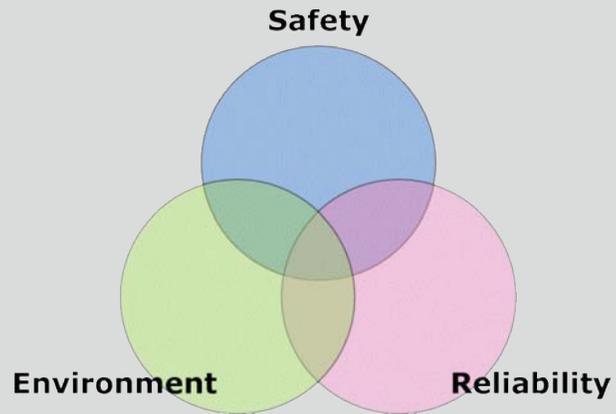


Environment obviously refers to the many natural resources of the state and the damage that can be done to them by spills or chronic pollution.



Three Filters

Reliability:
unacceptable
consequences to the
continuity of the
production of oil and
gas, from which the
State receives the
majority of its
revenues.



And reliability refers to the steady and predictable flow of oil and gas, from which the state receives significant resources.



What's the Scope?

	Likely to be Included	Likely NOT to be Included
GEOGRAPHY	North Slope to Prince William Sound; Cook Inlet	Areas of future oil development
INFRASTRUCTURE COMPONENTS	Production wells, gathering lines, facility piping, crude oil pipelines, gas and water injection systems, oil and gas processing and treatment, waste management and disposal, storage tanks, terminals, and marine loading facilities	Marine transportation Refineries and refined product distribution Exploration and future development Future facilities or projects
OTHER	Natural aging process (corrosion, abrasion, wear, and fatigue) Operating procedures and standards Maintenance and management Regulations and agency oversight Foreseeable changes in oil type such as increase in heavy oils Foreseeable changes in oil and gas production volume Natural hazards (earthquake, tsunami, severe weather, ice, climate change)	Potential threat of terrorist attacks or sabotage Other extractive industries



As far as what will be included in the risk assessment, the final answer will be determined in phase one—with the careful review of the project design I referred to earlier. For now, we envision that the scope will be defined as shown here.

You'll note that the scope includes the North Slope down to the loading arms at the Valdez Marine Terminal, but not TAPS-trade tankers. Likewise, in Cook Inlet, the scope includes the Cook Inlet oil field, but not marine transportation.

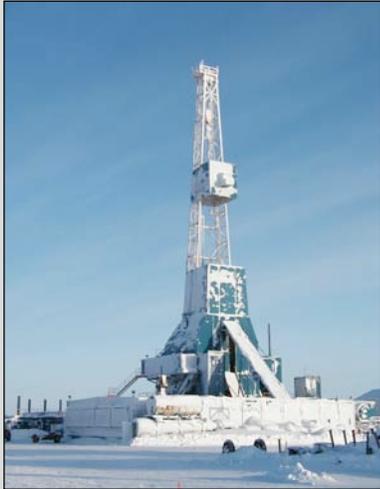
Furthermore, the assessment will include only infrastructure that is already in place, not new development.

We'll be looking at many risk factors, ranging from natural hazards to management practices, but not including terrorism or sabotage.



Phase 1

Review of Risk Assessment Design



- ➔ Independent peer review
- ➔ State & federal agencies
- ➔ Public
- ➔ Infrastructure Operators
- ➔ University of Alaska



As I mentioned earlier, the risk assessment contractor will propose a project design that will be rigorously reviewed. Getting this part right is critical to the project. DEC will arrange for a high-level independent peer review, and we have already started looking at our options.

Also, public briefings will be held around the state, and in-depth review opportunities will obviously be provided for infrastructure operators and federal agencies.

This brings us to the end of Phase 1.



Phase 2

Implement Risk Assessment



The Expert Firm will conduct the Risk Assessment in accordance with the Final Risk Assessment Design. This will require coordination and cooperation with:

- Oil and Gas Infrastructure Operators
- State and Federal Agencies



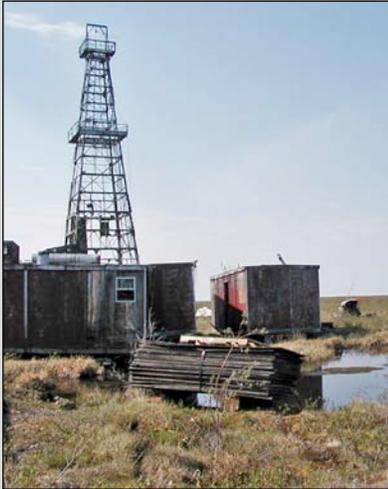
Phase 2 is the implementation phase. We won't know until the project design has been finalized what the actual implementation process will look like, but we do know it will be conducted primarily by the risk assessment contractor.

Coordination with industry operators and agencies will be very important during this phase. Again, the risk assessment design must have the mechanism to protect information deemed to be confidential or proprietary.



Phase 3

Analyze, Recommend, & Report



- Analyze Results
- Prepare Recommendations
- Draft Final Report



In Phase 3, the contractor will analyze data gleaned in Phase 2 and develop a report that ranks risks to the system and recommends mitigating measures. Phase 3 will end by the second quarter of 2010, per the Governor's requirements.



Potential Recommendations



- Physical changes to infrastructure
- Changes to policies, procedures, standards, or regulations
- Changes to infrastructure audits, management, or oversight



Of course, the end of this project will really mean the beginning of a significant agency effort to take the recommendations of the contractor and evaluate them in the context of the State's regulations, needs, and resources.

It is important to target mitigation measures accurately because all have some associated costs, and these recommendations will help us improve our aim, if you will. We envision that the recommendations provided to us at the end of the process will fall into the three general categories you see here.

[Consider reading from slide.]



Questions?



Thank you for your time today. We hope this presentation has given you a basic introduction to the Alaska Risk Assessment, and we welcome your questions.