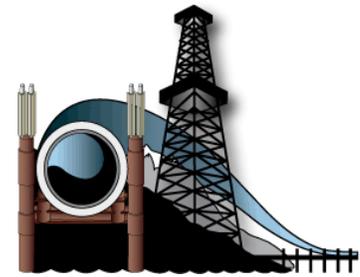


Meeting Minutes
State of Alaska Oil & Gas Infrastructure Risk Assessment



***This document is intended to be a summary of the meeting discussion for use by the project team in developing the risk assessment methodology and is not intended to be an official transcript.*

Topic:	Valdez Public Stakeholder Consultation Meeting
Date:	October 16, 2008
Time:	6:30 PM – 8:30 PM
Purpose:	The intent of this meeting was to solicit Valdez area public input as a stakeholder with interests in existing Alaska oil and gas industry infrastructure. Input provided at this meeting will help the expert firm design the risk assessment methodology.
Attendees:	Anne Brown, Department of Natural Resources (DNR)- Joint Pipeline Office (JPO) Mike Levshakoff, Alyeska Pipeline Service Company (APSC) Laura Meadows, APSC Sue Britt, APSC Ruth Black, APSC Jeff Simmons, Citizen Donna Schantz, Prince William Sound Regional Citizens Advisory Council (PWSRCAC) Bruce Painter, APSC Barry Roberts, APSC Myron Casada, ABS Consulting Steve Harris, ABS Consulting Ira Rosen, ADEC Bettina Chastain, EMERALD Gretchen Grekowicz, EMERALD

Agenda Item	Decisions/Actions
<p>1. Introductions</p> <p>A total of 14 individuals were in attendance including the project team, members of the State Agency Oversight Team (SAOT), several APSC representatives, one PWSRCAC representative, and one member of the public at large. The meeting began with an introduction by Ira Rosen, ADEC Project Manager, and introductions of those in attendance. The meeting was facilitated by Bettina Chastain, EMERALD Project Manager, and scribed by Gretchen Grekowicz.</p>	

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<p>2. Project Objectives, Background, and Scope</p> <p>The ADEC Project Manager provided a brief introduction of the project, which was followed by a detailed overview by the EMERALD Project Manager outlining project team organization, objectives, scope, and timeline.</p>	
<p>2.1 Project Team- The project team is comprised of the ADEC, lead agency for the project; the State Agency Oversight Team (SAOT) which encompasses representatives from multiple State agencies and provides oversight and guidance for the project; EMERALD, the lead contractor for the State; and ABS Consulting, EMERALD’s subcontractor. EMERALD, an independently run subsidiary of Doyon Limited, Inc. is a professional services consulting firm with a core focus on process safety and risk management. EMERALD will provide local Alaska infrastructure expertise and will manage the project. ABS Consulting, will supplement the technical effort and contribute large-scale technical risk assessment experience and an international perspective.</p>	<ul style="list-style-type: none"> • None
<p>2.2 Project Goal- The goal of the project is to conduct a system-wide risk assessment of oil and gas infrastructure in Alaska. This will involve taking a system of systems approach and evaluating the interrelations among components of the infrastructure. Although many risk assessments of individual infrastructure components have been executed in the past, this type of system-wide assessment has never been conducted in Alaska.</p>	<ul style="list-style-type: none"> • None
<p>2.3 Stakeholder Consultation Objectives- The objectives and structure of the stakeholder consultation process were explained by the EMERALD Project Manager. Six regional meeting areas along the infrastructure corridor are planned including Fairbanks, Kenai, Anchorage, Valdez, Barrow, and possibly Juneau. Individual meetings with key stakeholders, as well as public meetings, will be held in each location. The goal of the meetings is to solicit stakeholder input on significant concerns relating to existing oil and gas infrastructure in Alaska.</p>	<ul style="list-style-type: none"> • None
<p>2.4 Project Background- A background of the project was provided. Alaska’s infrastructure is aging and many of its components have exceeded their original design life. In 2006, North Slope oil production was halted by failure of one component of the system (pipeline corrosion leak). The governor announced this risk assessment project in May 2007 in response to that incident.</p>	<ul style="list-style-type: none"> • None
<p>2.5 Expected Outcome- The outcome of the project will be a “snapshot” of the current state of the infrastructure and will highlight components with the highest relative risk. Results of the Risk Assessment will be summarized in the form of a risk profile. The SAOT will use this risk profile to develop appropriate mitigation measures. This project has been integrally linked with the Petroleum Systems Integrity Office (PSIO) since its inception. The mission of PSIO is to evaluate gaps and overlaps in regulatory oversight of the oil and gas infrastructure. PSIO will use results of the risk assessment to prioritize gaps and make recommendations to the State with regard to regulatory oversight decisions.</p>	<ul style="list-style-type: none"> • None

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<p>2.6 Risk Assessment Standards- A brief explanation of standard risk assessment methodology was provided. The risk assessment process is an organized and systematic effort to identify and analyze hazardous scenarios. Risk assessment asks three questions: 1) what can go wrong? 2) how likely is it? and 3) how damaging would the event be if it were to occur? Rankings are assigned for both probability and consequence and are combined to form an overall risk ranking for each potential event.</p>	<ul style="list-style-type: none"> • None
<p>2.7 Project Scope- The scope of the project was described in terms of geography, infrastructure components, and other factors and considerations. The project includes the North Slope, Trans-Alaska Pipeline System (TAPS), and Cook Inlet infrastructure. Future developments such as exploration are excluded from the scope of the project. All “inside the fence” components of the infrastructure are included in the scope. Excluded components are transportation (including marine), reservoir maintenance and impacts to the reservoir, and refineries and distribution facilities not integral to operating the infrastructure. The team will consider design/operating life, the natural aging process, operating procedures and standards, maintenance and management, regulatory oversight, changes in oil composition, and natural hazards when conducting the study. Market conditions, such as commodity pricing which would make operations non-economical, and man-made hazards such as sabotage will not be considered in the study.</p>	<ul style="list-style-type: none"> • None
<p>2.8 Project Timeline- The project is broken into three phases. Phase 1 started in July 2008 and will run approximately thirteen months. The first task of Phase 1, development of the Project Plan, was completed and approved by the SAOT. The next step, Stakeholder Consultation, is currently underway. The team will use input from this consultation as well as best practices to develop a draft risk assessment methodology, which will be complete in February 2009. At that time the project team will come back out to the regions to solicit stakeholder input on the methodology. The methodology will also be reviewed by an independent peer review entity. Phase 2 will take about 6-months and will begin in August 2009. Phase 2 involves implementation of the methodology by working with industry to visit facilities and collect infrastructure information and data. Phase 3 is the last phase of the project and will be complete by the end of May 2010. It involves analyzing the data collected during implementation and developing a risk profile which will be summarized in the final report that will be presented to the State.</p>	<ul style="list-style-type: none"> • None
<p>3. Questions and Comments from Attendees on the Project Overview</p> <p>Questions and comments were taken both throughout the presentation and following the presentation. This section includes questions, answers, and general comments and suggestions relating to the scope, timeline, and management of the project.</p>	
<p>Q: Will information be provided to the public at the end of Phase 1 of the project?</p> <p>A: The draft methodology will be submitted to the State in February 2009 followed by a public comment period on that methodology in early spring. Public review will occur concurrently with the peer review process.</p>	<ul style="list-style-type: none"> • None
<p>Q: Will tank farms such as those in the village be considered as part of the project?</p>	<ul style="list-style-type: none"> • None

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<p>A: No, only tanks integral to operating the infrastructure will be considered. Distribution is out of the scope of the project.</p> <p>C: It would be interesting to know the capacity of the largest tank farm in the State.</p> <p>C: One of the consequence categories outlined in your presentation focuses on impacts to State revenue. It is important to note that significant impacts may be realized by local communities as a result of interruption in production without any impact to the revenue of the State as a whole, e.g., a line rupture in a tank farm.</p> <p>A: Multiple comments such as this have been raised by stakeholders.</p> <p>Q: If the supply of heating oil to Valdez or other communities was interrupted, the impact could be huge. Are these impacts included in the scope of the project?</p> <p>A: The definition of reliability in terms of this project relates specifically to impacts to State revenue streams. The team recognizes that other economic and socioeconomic impacts are important, and some very real risks exist in these areas, but that is not part of this project scope. This topic could potentially be recommended for future study.</p>	
<p>Q: Phase 2 of the project is about 5-months long. Is that enough time to implement the risk assessment?</p> <p>A: 5-months is a limited period of time, so the team must focus on implementing the methodology efficiently. As the team works to develop the methodology during Phase 1, existing data/information on the infrastructure will be gathered. Phase 2 will focus on filling in gaps where that information is lacking.</p>	<ul style="list-style-type: none"> • None
<p>Q: How does the team plan on obtaining data from industry?</p> <p>A: To date, the project team has met with industry through the Alaska Oil and Gas Association (AOGA) forum. The ARA project has the potential to benefit both industry and the State because it is proactive in nature, and industry has indicated that it intends to cooperate with the State. Currently, the State is working to establish protections for proprietary data that industry provides to the project. This project is not intended to be an enforcement action and to ensure success; a working relationship must be established with industry.</p>	<ul style="list-style-type: none"> • None
<p>3. Stakeholder Input on Focus of the Risk Assessment</p> <p>The EMERALD Project Manager outlined specific input to be solicited from stakeholders including portions of the infrastructure the public feels warrants project team attention. Components of the infrastructure in the scope of the project include production wells, gathering lines, facility piping, crude oil pipelines, gas and water injection systems, gas transport pipelines integral to the operating infrastructure, oil and gas processing and treatment, waste management and disposal (re-injection), storage tanks, terminals, marine loading facilities, and support systems.</p>	
<p>3.1 Focus on North Slope Facilities- A commenter recommended making North Slope facilities an area of focus. The independent citizen oversight provided by the</p>	<ul style="list-style-type: none"> • None

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<p>PWSRCAC has already highlighted most of the concerns associated with the VMT, which have been resolved. There seems to be a lack of regulatory oversight on the North Slope. For example, some of the lines that ruptured had not been pigged in 14 years, which was not addressed by the State as a preventative measure. The project team commented that low stress lines were not required to be pigged at that time.</p>	
<p>4. Stakeholder Input on Initiating Events</p>	
<p>Input was solicited on initiating events that have the potential to cause catastrophes relating to the infrastructure in the Valdez region.</p>	
<p>4.1 No input was provided relating to initiating events.</p>	<ul style="list-style-type: none"> • None
<p>5. Stakeholder Input on Priorities for Preventing Unplanned Events Related to Oil & Gas Infrastructure in Terms of Reliability, Safety, & Environment</p>	
<p>The three consequence categories that will be used to evaluate risks for the project were described. Safety refers to both public safety and safety of industry workers. Environment refers to any consequences to the natural resources of the State including waterways, wildlife, and other resources. Reliability refers to events that disrupt the flow of oil and subsequently have the potential to impact State revenue. The public was asked for their concerns of significance within the scope of the project.</p>	
<p>5.1 No input was provided in terms of consequences to reliability, safety, or the environment as a result of an unplanned event.</p>	<ul style="list-style-type: none"> • None
<p>6. Stakeholder Input on Other Specific Concerns or Priorities</p>	
<p>Stakeholders were asked to identify other concerns and priorities to the project team for consideration.</p>	
<p>6.1 <u>Maintenance & Inspection Programs</u>- It was recommended that the team analyze how maintenance and inspection programs are developed and monitored. The commenter noted that although the infrastructure is aging, it could potentially last for many more years if maintained properly. The project team added that the way facilities are maintained including reinvestments and inspections will be considered as part of assigning overall risk levels.</p>	<ul style="list-style-type: none"> • None
<p>6.2 <u>Transparency of State-issued Reports</u>- A commenter referenced a corrosion study performed for the State by Coffman Engineering in response to the 2006 incidents. The commenter pointed out that certain portions of that report were sanitized by the State or BP. The commenter also noted that she felt that the previous head of the ADEC Industry Preparedness Program (IPP) was demoted after she pointed out these problems. A representative from the PSIO office responded by noting that the PSIO will evaluate regulatory oversight and will use the risk assessment to help identify priorities for filling gaps in oversight.</p>	<ul style="list-style-type: none"> • None
<p>7. Best Risk Management Practices, Guidelines, and Standards; existing Risk Assessments, Studies, Reports, or Other Data/Information Relevant to Alaska Oil & Gas Infrastructure</p>	

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No suggestions for best risk management practices or data sources were suggested by the public.	

Attachments:	Presentation Stakeholder Information Packet
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NOTE:
Submit comments and corrections to Gretchen Grekowitz at ggrekowicz@emeraldalaska.com