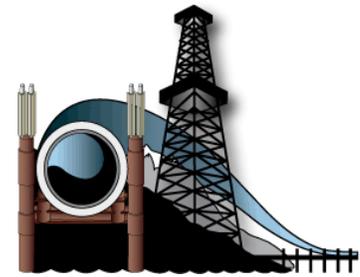


**Meeting Minutes**  
**State of Alaska Oil & Gas Infrastructure Risk Assessment**



*\*\*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.*

<b>Topic:</b>	<b>Kenai Public Stakeholder Consultation Meeting</b>
<b>Date:</b>	<b>October 1, 2008</b>
<b>Time:</b>	<b>6:30 PM – 8:30 PM</b>
<b>Purpose:</b>	The intent of this meeting was to solicit Kenai 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.
<b>Attendees:</b>	Sami Glascott, Alaska Oil & Gas Association (AOGA) Trent Dodson, Cook Inlet Regional Citizens Advisory Council (CIRCAC) Scott Griffith, XTO Energy Mike Engblom-Bradley, State of Alaska Petroleum Systems Integrity Office (PSIO) Jim Butler, Baldwin & Butler Kurt Olson, Alaska Legislature Michael Hurley, ConocoPhillips Marg Jackson, Alaska Legislature Konrad Jackson, Alaska Legislature Vinnie Catalano, CIRCAC Ira Rosen, ADEC Bettina Chastain, EMERALD Gretchen Grekowicz, EMERALD

Agenda Item	Decisions/Actions
<p><b>1. Introductions</b></p> <p>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>	
<p><b>2. Project Objectives, Background, and Scope</b></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>	

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<p><b>2.1 <u>Project Team</u></b>- 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 contributes large-scale technical risk assessment experience and an international perspective.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>2.2 <u>Project Goal</u></b>- 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"> <li>• None</li> </ul>
<p><b>2.3 <u>Stakeholder Consultation Objectives</u></b>- 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"> <li>• None</li> </ul>
<p><b>2.4 <u>Project Background</u></b>- 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"> <li>• None</li> </ul>
<p><b>2.5 <u>Expected Outcome</u></b>- 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"> <li>• None</li> </ul>
<p><b>2.6 <u>Risk Assessment Standards</u></b>- 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"> <li>• None</li> </ul>

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<p><b>2.7 Project Scope-</b> 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"> <li>• None</li> </ul>
<p><b>2.8 Project Timeline-</b> 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"> <li>• None</li> </ul>
<p><b>3. Questions and Comments from Attendees on the Project Overview</b></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><b>Q:</b> Is the funding for this study the result of budgeting through the State of Alaska legislature?</p> <p><b>A:</b> Yes, this study was initiated by the Governor’s office and the project budget was appropriated by the legislature.</p> <p><b>Q:</b> Why is the project being managed by ADEC rather than the PSIO?</p> <p><b>A:</b> The PSIO had just been formed at the time this project was initiated and had minimal staffing. ADEC was in the best position to manage the project on behalf of the State.</p> <p><b>Q:</b> What amount was appropriated by the legislature for the project?</p> <p><b>A:</b> \$5 million.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>

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<p><b>Q:</b> A risk assessment of this scale has not been conducted anywhere in the world?</p> <p><b>A:</b> Not that the project team is aware of.</p> <p><b>Q:</b> Is it because Alaska is so big?</p> <p><b>A:</b> The team is not sure why no other risk assessments of this scale have been conducted.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>Q:</b> Weren't the corrosion issues that occurred a unique situation because those pipelines were not under any regulatory jurisdiction? That is not the case for TAPS or Cook Inlet, so is the project studying a topic about which the State already has information?</p> <p><b>A:</b> Distinct portions of the infrastructure are regulated by a variety of agencies including the Alaska Oil and Gas Conservation Commission (AOGCC), Division of Oil and Gas, Department of Transportation (DOT), and ADEC.</p> <p><b>Q:</b> Are you saying that some areas of the infrastructure do not have regulatory oversight?</p> <p><b>A:</b> Some portions only have minimal oversight.</p> <p><b>A:</b> The project team's charter is to look at the system as a whole and to take the information that already exists, including previous studies, as well as existing regulatory oversight into account. The team will narrow its focus for Phase 2 of the project to areas that have not been heavily regulated. PSIO's work lines up with the project in terms of regulatory oversight because it will use results of the risk assessment to recommend priorities for filling gaps and eliminating overlaps in regulatory oversight of the infrastructure.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>Q:</b> What will happen when this project ends?</p> <p><b>A:</b> An implementation plan has not been developed yet, but the ADEC will work hand in hand with the PSIO to implement actions and mitigation measures as a result of the risk assessment. This may be done through meetings with industry or through additional regulatory oversight.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>Q:</b> Industry is a prime source of information. What confidentiality issues will exist regarding their information? Is public information available on TAPS, Cook Inlet Platforms, and CIGGS?</p> <p><b>A:</b> Some information is available publicly. The team is gathering this information. Confidentiality is an important issue that the State is working through with industry to ensure that industry is comfortable enough to share information and has confidence that information will be protected. The results of this project will be much more valuable if the project team can work with industry.</p> <p><b>Q:</b> Why is the project under ADEC management when Department of Natural Resources (DNR) and Department of Revenue (DOR) have specific statutory</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>

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<p>ability to protect information?</p> <p><b>A:</b> ADEC is attempting to adopt some of these protections through interagency agreements.</p> <p><b>C:</b> It is important that the project has the best information possible to achieve its objectives. For industry, the threat of passing on incriminating evidence may be a concern. It will be important to offer industry operators protection against incrimination if they cooperate with the team by providing information/data. It is recommended that it would be good to offer incentives such as this to those who cooperate, and disincentives to those members of industry who do not cooperate. State and federal protections for this type of situation exist.</p> <p><b>C:</b> AOGA represents 17 oil and gas owner/operators across the State of Alaska. The AOGA members are well aware that some competition exists regarding companies that give more information than others. The group of industry representatives needs to come to the table as a whole and work collaboratively. Industry understands that it will succeed only if the project succeeds so it wants to work with the project team, however; confidentiality issues must be worked out before this can happen.</p>	
<p><b>Q:</b> How is the project team viewing industry? As a stakeholder?</p> <p><b>A:</b> Industry is definitely a key stakeholder. Meeting with AOGA was one of the first steps the project team took in initiating work on the project. The project team would like industry to share its best risk management practices and provide studies that have already been conducted. The project team sees industry as an integral part of the team and would like to start meeting with them as soon as possible. It is important to also point out that industry is participating in these public meetings.</p> <p><b>C:</b> A stakeholder is someone who is not directly involved in managing the risk. Industry is different than a typical stakeholder because it is actually taking action to deal with risk.</p> <p><b>A:</b> Any person with the potential to be effected is a stakeholder. The team understands that industry is a crucial part of the project. Upon completion of the project, industry will be a beneficiary of the report. Hopefully it will gain information from this report. If information reveals that actions have not been taken when they should have, there could be repercussions for industry.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>Q:</b> How was advertising done for this meeting? People were not aware of the meeting. More people would have attended with better advertising.</p> <p><b>A:</b> The team formed a list of key stakeholders that was run through the SAOT for approval. The team has contacted key individuals and groups and held meetings with those stakeholders. When one-on-one meetings are held, the attendees do not always feel compelled to additionally attend the public meeting. An ad was placed in the newspaper and public service announcements were run. Additionally, anyone who completes a survey and includes their contact information is added to the mailing list for future project notifications. The team wants to provide every avenue possible to stakeholders for providing input to the process. Do you have additional suggestions on how the project team should have advertised to reach out</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>

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<p>to others?</p> <p><b>C:</b> An email tree would have been a useful tool. Notification for this meeting left a lot to be desired. The legislative representatives indicated that they would be willing to review the project team's list to see if any key stakeholders were missed.</p>	
<p><b>Q:</b> The project is focused on existing infrastructure and it is a snapshot in time. How is the team balancing the risk profile with the original design of the infrastructure? For example, the entire infrastructure could have been built in stainless steel, but if that was the case the pipeline would have never been built due to cost. In other words, some risks are not economically worth mitigating. How will the team handle this?</p> <p><b>A:</b> The team will evaluate the current state of the infrastructure in comparison to the original design condition. The team hopes to receive industry data that shows corrosion control programs are in place, that lines are being pigged, and data supporting that industry has confidence that it can continue operating safely past the design life of the infrastructure.</p> <p><b>Q:</b> How will you make the value judgment regarding what constitutes a reasonable level of maintenance and reasonable dollars to invest in the infrastructure? How will you determine how long systems are expected to operate into the future?</p> <p><b>A:</b> The team will have to make some judgments regarding scale of consequences. The team will evaluate a variety of factors and will assess the management systems industry has in place. This is part of the methodology and has not been developed yet.</p> <p><b>C:</b> There are likely to be differences in values. To someone who is not responsible for paying to maintain the infrastructure like the State, it may seem worth fixing items even at a very high price, but industry may have a different point of view since it has to pay for repairs and improvements.</p> <p><b>C:</b> This discussion is a mix of project scope and implementation of results that will occur after project completion. Following the project, the State would like to present the results to industry to identify how best to handle the highlighted risks. The mission of this project is to identify the risks, not take action to mitigate them.</p> <p><b>C:</b> The EMERALD project team will create a risk profile and identify risk contributors. EMERALD will then present this profile to the State and the State will determine how best to implement the results.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>4. Stakeholder Input on Focus of the Risk Assessment</b></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>	

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<p><b>4.1</b> No input was provided on specific components of the infrastructure that warrant the attention of the project team.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>5. Stakeholder Input on Initiating Events</b></p> <p>Input was solicited on initiating events that have the potential to cause catastrophes relating to the infrastructure in the Kenai region.</p>	
<p><b>5.1</b> No input was provided relating to initiating events.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>6. Stakeholder Input on Priorities for Preventing Unplanned Events Related to Oil &amp; Gas Infrastructure in Terms of Reliability, Safety, &amp; Environment</b></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><b>6.1</b> 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"> <li>• None</li> </ul>
<p><b>7. Stakeholder Input on Other Specific Concerns or Priorities</b></p> <p>Stakeholders were asked to identify other concerns and priorities to the project team for consideration.</p>	
<p><b>7.1</b> <u>Prioritization of Consequence Categories</u>- The project team should consider re-ordering the three categories. Safety should be the top priority, then environment, then reliability.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<p><b>7.2</b> <u>Consideration of Industry’s Perspective</u>- A commenter recommended that the project team consider industry’s interests in addition to the State’s interests. The assessment cannot be solely focused on how much money the State can make. If the team does not consider industry’s perspective, it runs the risk of ending up with bad information. The team should consider the parties that spend the money to mitigate the risk. From a practical standpoint, the State oversees management of the infrastructure, but does not incur actual risk. The State does not suffer the consequences if a risk happens. State employees do not go to jail. The State does not have to make capital investments in the infrastructure. The State and the public are exposed to the risk, but are not responsible for it. This difference in perspective needs to be reconciled. The project results should be beneficial to industry as well as the State. I am an Alaska resident, and I do not want to see \$5 million spent on this study without any benefit to the risk takers. If industry is not included, the team runs the risk of creating the model in a vacuum.</p> <p>The ADEC Project Manager commented that everyone is a stakeholder in some sense. The team’s goal is to work cooperatively with industry to develop the methodology. The team would like to develop an equivalency matrix comparing consequence definitions for each of the three categories. Consequence levels considered significant will vary between different people. The team needs to work with industry as a stakeholder to find out what it considers significant. It all comes</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>

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back to loss of integrity and consequences.	
<b>7.3 Evaluation of Oil Company Contractors</b> -A commenter noted that contractors that work for oil companies should be recognized as part of the project since they provide certain critical services to the companies.	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>8. Best Risk Management Practices, Guidelines, and Standards; existing Risk Assessments, Studies, Reports, or Other Data/Information Relevant to Alaska Oil &amp; Gas Infrastructure</b> No suggestions for best risk management practices were suggested by the public. Recommended data sources are summarized below.	
<b>8.1 Industry Information &amp; Data</b> - Multiple commenters pointed out that industry holds a large amount of the information including past studies that are pertinent to the project. No other specific recommendations were made regarding existing studies or data.	<ul style="list-style-type: none"> <li>• None</li> </ul>

<b>Attachments:</b>	Presentation Stakeholder Information Packet
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**NOTE:**

Submit comments and corrections to Gretchen Grekowitz at [ggrekowicz@emeraldalaska.com](mailto:ggrekowicz@emeraldalaska.com)