

**Preliminary Comments on
Doyon-Emerald/ABS Proposed Methodology
for State of Alaska Oil and Gas Infrastructure
Risk Assessment Project ***

May 5, 2009

**Prepared for
Alaska Forum for Environmental Responsibility
P.O. Box 188
Valdez, Alaska 99686**

And

**The Alaska Wilderness League
122 C St. NW, Ste. 240
Washington, DC 20001**

By

**Richard A. Fineberg
Principal Investigator, Research Associates
P.O. Box 416
Ester, Alaska 99725**

Please address comments or questions to Richard A. Fineberg at:

E-mail: fineberg@alaska.net

Phone: (907) 479-7778

** Comprehensive Evaluation and Risk Assessment of Alaska's Oil and Gas Infrastructure:
Proposed Risk Assessment Methodology (Revision 1; March 20, 2009)*

Changes in the Initial Project Design

On review, I find that the Alaska Risk Assessment (ARA) project has been fundamentally changed from its original design in ways that diminish this project's capability to accomplish its stated goals. The state's request for proposals (RFP), issued in March 2008, tasked the independent contractor with recommending mitigation measures to reduce risks in categories that included physical changes covering the following categories: physical changes to infrastructure, changes to policies, procedures, standards, or regulations; and changes to infrastructure audits, management, or oversight.¹ But two changes to the original project plan, quietly made in September 2008, significantly alter the terms:

- The project contractor selected by the state to conduct the risk assessment on Alaska's oil and gas production and delivery systems will not be making independent recommendations on risk mitigation; and
- The project contractor will not be evaluating the government oversight system.

These changes were made at independent contractor Doyon-Emerald/ABS's request, shortly before the Alaska Department of Environmental Conservation (ADEC) and Doyon-Emerald/ABS convened a series of meetings in September 2008 to introduce the project to the public in five Alaska communities. I find no record that these changes were discussed during the public meetings. But at the end of the first paragraph of the ARA web site's "Introduction" page, the following statement was removed from the original posted project description:

*The risk assessment will conclude with a list of recommended mitigation measures based on the risks identified.*²

And although the phrase "regulations and agency oversight" still appears on the web site in the final list of subjects to be included in the contractor's report,³ this task also

¹ State of Alaska, "Request for Proposals: Comprehensive Evaluation and Risk Assessment of Alaska's Oil and Gas Infrastructure" (RFP Number 2008-1800-7379), March 14, 2008, p. 29.

² "Alaska Risk Assessment (ARA) of Oil & Gas Infrastructure: Introduction," <http://www.dec.state.ak.us/spar/ipp/ara/intro.htm>; updated 04/16/09. (I do not know when the original sentence was deleted from the original web site posting, contained that sentence when I accessed it on or about April 19, 2008.)

³ "Alaska Risk Assessment (ARA) of Oil & Gas Infrastructure: What's Included," <http://www.dec.state.ak.us/spar/ipp/ara/whats.htm>; updated 04/16/09.

appears to have been transferred from the independent contractor to the state. It appears that responsibility for making recommendations now falls to ADEC), placing the agency in the awkward position of evaluating itself and other government monitors.

As a result of these changes, the independent review mission of the ARA contract team is now considerably narrower in scope than initially intended, to the detriment of the stated goals of assuring facility integrity and safe operations.

Failure to Base Risk Analysis on Verified Field Data

In response to a Nov. 4, 2008 comment letter I co-signed calling for field observations to identify problems associated with the erosion of operating standards that were supposed to ensure safe petroleum production and transport, ADEC Project Manager Ira Rosen responded that “[t]he project team will consider operations and management practices as part of the risk assessment, but conducting extensive field inspections and review of regulatory oversight is not within the scope of the project.”⁴ In light of TAPS history, I find it almost inconceivable that extensive field inspections are beyond the scope of this project.

My 1996 and 2002 status reports on TAPS, supplemented by reports on my web site since 2004, contain numerous examples of problems on TAPS that the facility owner/operators were too slow to identify and, once identified, too slow to address, placing the environment at undue risk. Based on case studies documented in these reports, it is my opinion that lax government oversight can be clearly identified as a major contributing factor to many of these problems.⁵

Based on the experiences I have documented, I conclude that the proposed Alaska Risk Assessment methodology is fundamentally – if not fatally – flawed by

- failure to base its conclusions on first-hand field observation and document inputs; and

⁴ See: Richard A. Fineberg, Pamela A. Miller and Dan Lawn, “AWL, NAEC and Alaska Forum Comments on ARA Project” (“AWL Letter”), Nov. 4, 2008; and Ira Rosen, “ADEC Response to AWL, NAEC and Alaska Forum Comments on ARA Project” (“ADEC Response to AWL Letter”), Jan. 6, 2009, p. 2. (<http://www.dec.state.ak.us/spar/ipp/ara/documents.htm>.) In fact, as noted above, “regulations and agency oversight” still appears in the final list of subjects to be included in the contractor’s report.

⁵ Major reports are listed at items 7 thru 12 of “Some Past Reviews of Alaska’s Oil & Gas Infrastructure,” (Appendix to “AWL Letter”). See also my occasional reports on TAPS and North Slope problems, posted at <http://www.finebergresearch.com>.

- failure to confirm the validity of source information and conclusions through (a) observation of field operations; (b) on-site inspection of physical facilities; and (c) a randomized spot-check system to provide quality assurance verification of ARA input data.

Similarly troubling in this regard are passages in the Doyon-Emerald/ABS January 2009 interim report suggesting that, as of that date, the industry had not been forthcoming with written information.⁶

In sum, on review of the proposed methodology, I respectfully suggest that without extensive field observation and ground-truthing of data the proposed ARA methodology cannot be expected to deliver anything more than a sad, multi-million-dollar example of the phenomenon known as GIGO.

Inadequate Stakeholder Outreach

As an Alaska stakeholder, I have conducted extensive research on the operations of Alaska petroleum facilities in the past and, more recently, co-signed an extensive letter on this project at the close of the initial public comment period in November 2008 after attending public meetings on project. At this time I feel compelled to state for the record that I do not believe the ARA Stakeholder Process has been appropriately responsive to the concerns I have attempted to share with the ARA team.

Academic critiques of risk analysis suggest that attitude may be an important factor that separates risk analysis practitioners, acting on behalf of development agents, from concerned members of the public.⁷ Consider in this regard the evident approval

⁶ Doyon-Emerald and ABS Consulting, *Comprehensive Evaluation and Risk Assessment of Alaska's Oil and Gas Infrastructure: Phase 1 – Interim Report*, Jan. 16, 2009, pp. 92-97 (<http://www.dec.state.ak.us/spar/ipp/ara/documents/090116ARAFINALInterimReportRev3.pdf>).

⁷ The following observations from a critical academic review of risk assessment methodology recognize the importance of the subtle but pervasive ways that human attitudes and perceptions can function to undermine the objectivity of risk assessments:

- “. . . [A]ny theory of risk perception demands an understanding of how preferences and evaluative judgments are formed, that is, an understanding of attitudes.”
- “. . . [I]t is . . . easy to observe striking differences between stated attitudes and actual behavior: many people have pro-environmental attitudes and yet engage in environmentally destructive behavior. Knowledge about the physical state of the environment will not solve this attitude-behavior gap.”
- “. . . [I]ncreased specialization of labor . . . has taken place in our advanced technological society. As a result of this specialization, no single person is in full control over the technological systems, she or he is working with or otherwise dependent on.”

with which the Doyon-Emerald/ABS team cites the Environmental Impact Statement contractors prepared in 2001-2002 for renewal of TAPS right-of-way agreements with the state and federal governments. The Doyon-Emerald/ABS team wrote:

A unique aspect of the ARA project is that it considers three different classes of consequences: environment, safety, and reliability. The TAPS Renewal EIS is the only past study known to the project team that also addressed all three of these consequence classes.

. . . . it remains a valuable reference document because of historical outage and spill data collected and documented and the analyses regarding future environmental impacts of TAPS operations.⁸

Some who participated in the 2002 TAPS lease renewal process (myself included) take a very different view of the role the TAPS EIS played in the 2002 right-of-way renewal. In 2004 I reported that the TAPS EIS uncritically relied on shoddy government monitoring reports to dismiss public concerns about chronic performance failures. State and federal officials then used the EIS findings to validate their decision to renew the right-of-way agreements without strengthening the right-of-way provisions to insure improved oversight. Although the Doyon-Emerald / ABS report praises the TAPS EIS analysis of future operations, it is my view that the TAPS EIS deliberately sidestepped consideration of the plans for the major overhaul of TAPS facilities known as Strategic Reconfiguration, to the detriment of the public interest in enhanced safety.⁹

My own concerns aside, I do not believe that the ARA process has been responsive to the concerns of citizen stakeholders in general.

-
- “, , , [The author] compares risk conceptualizations of inhabitants of Andean highlands and of Western-oriented development experts who work in the same area. . . . [These two groups exhibit differences in risk perception.]”
 - “The joint expertise of different social science disciplines is needed both to understand the interaction of human activities with the environment and to bring about changes in human behavior in order to cope with environmental problems.”

(Gisela Bohm, Josef Nerb, Timothy McDaniels and Hans Spada, “Environmental Risks – Perception, Evaluation and Management: Introduction,” in G. Bohm, J. Nerb, T. McDaniels and H. Spada [eds.], *Environmental Risks: Perception, Evaluation and Management* [Amsterdam: Elsevier Science Ltd., 2001], pp. xii-xvii [Research in Social Problems and Public Policy, Vol. 9].)

⁸ Doyon-Emerald and ABS Consulting, *Comprehensive Evaluation and Risk Assessment of Alaska’s Oil and Gas Infrastructure: Proposed Risk Assessment Methodology – Revision 1*, Mar. 20, 2009, p. 19 (http://www.dec.state.ak.us/spar/ipp/ara/documents/Proposed%20Risk%20Assessment%20Methodology_Rev%201.pdf).

⁹ See: Richard A. Fineberg, “Background Report: TAPS Lease Renewal – Opportunity Lost,” August 2004 (<http://www.finebergresearch.com/tapsenviro.html>) and the linked supplementary documents.

Concluding Comments

The narrowed scope of the independent contractor's report may relieve the state's contractor of criticizing its government client and its industry associates, but this quiet change in the game plan does not serve the public interest.

In any event, the ARA's failure to ground-truth its report in on-site field work severely diminishes the likelihood that its survey will get to the heart of the problems that threaten the safety of Alaska oil and gas infrastructure operations.

In addition to the historical documentary record of lax government oversight on TAPS and the North Slope to which I have referred in the preceding comments, recent articles available on my web site strongly suggest that independent review of government monitoring programs should be considered an essential component of a comprehensive evaluation and risk assessment of Alaska's oil and gas infrastructure.¹⁰

¹⁰ See, for example, the following articles archived at finebergresearch.com:

Richard A. Fineberg, "Federal Pipeline Agency Issues Largest Proposed Penalty of 2007 Against Alyeska Pipeline Service Co. – Reports, January 2007 Fire at Pump Station 9 Call TAPS Safety Practices Into Question – As Alyeska Struggles to Put Strategic Reconfiguration into Operation, Government Agencies Struggle to Coordinate Oversight Efforts," January 20, 2008
(<http://www.finebergresearch.com/archives/arcalfine080616.html>).

Richard A. Fineberg, "Joint Pipeline Office (JPO) executive Council: Alaska Pipeline Oversight Directorate Meets for the First Time in Five Years – Who Are Those Guys and How Well Have They Monitored the TAPS Strategic Reconfiguration Project?" July 14, 2007
(<http://www.finebergresearch.com/pdf/JPOXCARC080927.pdf>).

Richard A. Fineberg, "Documents Reveal Trans-Alaska Pipeline In Trouble; Monitors Punt," Nov. 2, 2005 (<http://www.finebergresearch.com/archives/spilling.html>).