

Regional Citizens' Advisory Council / "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers."

In Anchorage: 3709 Spenard Road / Suite 100 / Anchorage, Alaska 99503 / (907) 277-7222 / FAX (907) 277-4523
In Valdez: P.O. Box 3089 / 130 South Meals / Suite 202 / Valdez, Alaska 99686 / (907) 834-5000 / FAX (907) 835-5926

MEMBERS

Alaska State
Chamber of
Commerce

June 2, 2009

Nuka Research and Planning Group

ARA Comments

PO Box 175

Seldovia, AK 99663

Alaska Wilderness
Recreation & Tourism
Association

Chugach Alaska
Corporation

Subject PWSRCAC Comments Regarding Proposed Risk Assessment Methodology

Introduction.

City of Cordova

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is a nonprofit, public interest organization established in 1989 to oversee operations of the Trans Alaska Pipeline System (TAPS) Valdez Marine Terminal (VMT) and the tanker traffic transporting crude oil from the VMT. PWSRCAC's mission simply stated is "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers." PWSRCAC's 18 member entities include the cities, towns, and villages affected by the *Exxon Valdez* oil spill plus other commercial, civic, and environmental organizations. PWSRCAC was formed in the wake of the *Exxon Valdez* oil spill and is a wholly independent citizens' organization providing oversight of the VMT and the TAPS tanker fleet to ensure that such a devastating oil spill does not happen again. PWSRCAC operates under a mandate from the Oil Pollution Act of 1990 (OPA90) and is primarily funded under a contract allowing complete editorial independence with Alyeska Pipeline Service Company (APSC). The principle underlying the establishment of PWSRCAC is that the people bearing the risk (*i.e.* those living in and near Prince William Sound) associated with VMT and tanker operations should have a say in management of those operations with respect to reducing and understanding that risk.

City of Homer

City of Kodiak

City of Seldovia

City of Seward

City of Valdez

City of Whittier

Community of
Chenega Bay

Community of
Tatitlek

Alaska Risk Assessment.

Cordova District
Fishermen United

PWSRCAC staff and volunteers have attended several of the outreach meetings conducted by the Department of Environmental Conservation and its contractors. We have also examined the "Comprehensive Evaluation and Risk Assessment of Alaska's Oil and Gas Infrastructure, Proposed Assessment Methodology," Revision 1, dated March 20, 2009, also known as the ARA. PWSRCAC appreciates the opportunities to participate in the process and to provide the comments and recommendations contained herein. Our comments and recommendations are directed at the risk assessment concept as defined in the methodology and its implementation, resources available to actually perform the risk assessment, risk assessment tactics versus strategies, and speculative use of uncertain data used to drive risk calculations. In brief, PWSRCAC is concerned that the ARA process contains significant deficiencies that will, if not corrected, seriously compromise the utility and credibility of any risk assessment produced from it.

Kenai Peninsula
Borough

Kodiak Island
Borough

Kodiak Village Mayors
Association

Oil Spill Region
Environmental
Coalition

Risk Assessment and Process.

Prince William Sound
Aquaculture
Corporation

Risk Assessment or Risk Catalog. When the ARA process started, it appeared that the goal was to assess risks associated with development and operation of the many components of Alaska's oil handling infrastructure. It now appears that the process has evolved into a process of merely

cataloging the risks. While risk catalogs may be useful in some circumstances, they are not sufficiently quantitative to permit reasonable comparison of risks by Alaska's decision makers, which would be so useful in the ARA case. Consequently, when the Risk Assessment is finished, it will not enhance decision making associated with the oil handling infrastructure. The current process should revert to the original concept of risk assessment.

Completeness of ARA. Even the original risk assessment concept omitted some very important components of the infrastructure, including the on water infrastructure, namely the transportation systems for moving oil on Alaskan waters. The exclusions from the ARA include some of the riskiest infrastructure systems in the State, those that have produced the biggest and environmentally most destructive oil spills that have ever occurred in Alaska. A risk assessment that is incomplete will have very limited utility. We believe the ARA should consider the complete set of Alaska's infrastructure if the term "Comprehensive" is to be applied to the efforts.

Outreach to Stakeholders. The public meeting approach to reach stakeholders is commendable; however, attendees at the meetings appear to be primarily the "players" from the oil industry and their regulators. Very few *bona fide* public stakeholders appear among those listed as having attended the outreach meetings. Disinterest in the process on the part of the public is quite evident. It is reasonable to believe that the outreach did not achieve its goal of meaningfully involving the public. We recommend that additional outreach methods or more aggressive invitations to participate in the ARA process be tried.

Access to Facilities. Most, if not all of the infrastructure to be assessed is privately owned. Permission of the owners of the facilities to access both the facilities and the records pertaining to operational risk is needed to assure a meaningful risk assessment. There are indications, however, that the owners are being only minimally cooperative (*i.e.* providing no more information or access than required by law or regulation) with respect to facility and records access. Unfettered access to records and facilities is needed such that all relevant information is considered in conducting the risk assessment.

End Uses of the Risk Assessment. The ARA process appears to be producing a risk assessment without considering the end use to which it will be put. For example, no recommendations with respect to reducing risks identified are expected to be forthcoming. Most people who are bearing a risk would be interested in knowing if the risk can be reduced and how to do it. Recommendations for reducing or mitigating risks, we believe, could be perhaps the most useful part of any risk assessment. We suggest that well developed risk reducing or mitigating recommendations be included as an integral part of the final risk assessment report.

Process Introspection. Many of the preceding comments are associated with usefulness of the end product. A reasonable person might be interested in knowing whether the occurrence of a high-consequence event might have been prevented had the risk of it happening been identified before the occurrence. For example, is it likely that the already occurred failure of the North Slope gathering lines would have been identified and the associated spill event prevented if this methodology had been applied ahead of time to those systems? There is little evidence that this is the case, since the unplanned pipeline shutdown associated with the 2006 spill was not of significant enough quantity to be included in the production loss boundaries being considered within this assessment methodology.

Available Resources.

Five million dollars were appropriated to accomplish the entire risk assessment. A considerable portion of this appropriation has already been spent on developing the methodology. When the

Joint Pipeline Office sponsored development of an Environmental Impact Statement (EIS) in 2003 to support renewal of the Grant and Lease for the Trans Alaska Pipeline System, the funding thought necessary to develop the EIS was initially estimated at approximately \$4M. Although a final accounting was never released, final costs appear to have overrun the initial estimates by a factor of 4 or 5. Thus, it appears that the \$5M funding is woefully insufficient for implementing the proposed methodology.

Risk Assessment Strategies and Tactics.

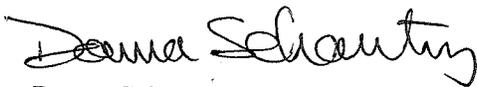
The methodology contains a very large set of tactical procedures for evaluating small elements of risk. The appendices of the methodology are especially rich with respect to tactics that can be applied to build a risk assessment of an infrastructure component. The tactics have not been integrated into strategies that will produce an infrastructure risk assessment that can be meaningfully used to compare risks among individual infrastructure components and then select the most serious risks for mitigation. When lack of completeness, inadequacy of available funding, and the decision not to produce recommendations are considered, there is reason for concern that the end product of the methodology will have extremely limited usefulness.

Technical Aspects of Methodology Implementation.

The statistical mathematics underlying best-practices risk-assessment methodology, while somewhat complicated, are well developed and well understood, so we will not attempt to reproduce them here. However, we would note that they lead to two inescapable requirements for a credible risk assessment: 1. Errors associated with each risk analyzed must be fully propagated in the risk calculations all the way through the process to the final estimates for the composite risks. 2. Probabilities and costs whose bases are mainly speculative or matters of “professional judgment” must not be used in the risk calculations. The ARA methodology appears to be silent on the propagation and handling of errors, and on quality control in the development of estimates for probabilities and costs.

In summary, we believe the ARA methodology suffers from significant deficiencies that, left uncorrected, will seriously compromise the utility and credibility of any risk assessment produced from it, both for the public at large and for regulators tasked with using the results. We would be pleased to provide additional comments or information that would help in achieving a risk assessment that will provide credible, useful, and reliable information on the safety of oil industry operations in our state. Please contact either Donna Schantz or Tom Kuckertz as needed.

Sincerely,



Donna Schantz
Acting Executive Director

Cc: Larry Hartig, Commissioner DEC.