

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

**May 13, 2009**  
*(Fairbanks, Alaska)*

Prepared for  
**Alaska Forum for Environmental Responsibility**  
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**And**

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**By**

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

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

The comments and recommendation I offer today supplement and update the preliminary information and comments on the Doyon-Emerald / ABS Alaska Risk Assessment submitted in Anchorage May 5 and reflect additional information gained during the Anchorage meeting. In addition to background information (not repeated here), my original comments dealt with three subjects:

- Changes in the initial Alaska Risk Assessment (ARA) project design;
- Failure to base risk analysis on verified field data; and
- Inadequate stakeholder outreach.

### **Changes in the Initial Alaska Risk Assessment (ARA) Project Design**

The state's request for proposals (RFP), issued in March 2008, tasked the independent contractor with recommending mitigation measures to reduce risks "after considering at least the following possible mitigation categories:"

- Physical changes to infrastructure;
- Changes to policies, procedures, standards, or regulations; and
- Changes to infrastructure audits, management, or oversight.<sup>1</sup>

As noted in my preliminary comments May 5, at the end of the first paragraph of the ARA web site's "Introduction" page the following statement has been removed from the original posted project description:

The risk assessment will conclude with a list of recommended mitigation measures based on the risks identified.<sup>2</sup>

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

<sup>2</sup> "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.)

In an e-mail to ADEC Project Manager Ira Rosen Sept. 3, 2008 (copy attached), Doyon Emerald President and General Manager Bettina S. Chastain, P.E., submitted documentation to support a requested “change to eliminate the need for us to develop Recommendations as part of our final deliverable.” The following day, Rosen e-mailed colleagues to advise them that “[p]er internal discussions, I asked that the task to Recommend Mitigation Measures be taken out. The recommendations will come from the State.” When an ADEC colleague wrote back to question the proposed contract change because it would place ADEC in the position of “making recommendations/conclusions on ourselves,” Rosen responded that the possibility of recommendations regarding “increased oversight or regulation” was of concern to industry owners/operators.” For that reason, Rosen wrote, “the current thinking is to leave that to the state,” rather than to the consultants.<sup>3</sup>

At the meeting in Anchorage last Tuesday morning (May 5), I asked Ms. Chastain if Doyon-Emerald / ABS would be making recommendations. She responded that recommendations were a part of the contract, and that she wished Mr. Rosen (who had stepped out of the room a few moments before) were present to comment.

I requested that this subject receive further consideration during the afternoon session. However, during the afternoon a Doyon-Emerald / ABS representative said that he did not wish to discuss whether the independent consultants would be making recommendations, adding that the state is still deciding this question.

In sum, it appears that the independent contractor’s mission is quietly being narrowed in scope by the transfer to the state of responsibility for making recommendations regarding both risk mitigation and the effectiveness of the oversight regime that is supposed to protect the public interest by mitigating those risks. But if the independent contractor does not make recommendations about what it finds, will the project provide the “thorough, independent appraisal of the condition of the state’s oil and gas facilities” the governor intended when she launched the project two years ago?<sup>4</sup>

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<sup>3</sup> The e-mails quoted here are attached to these comments as Exhibit I.

<sup>4</sup> Office of the Governor, “Assessment of Oil and Gas Infrastructure: Governor Palin Calls for Comprehensive Assessment of Alaska’s Oil and Gas Infrastructure,” May 1, 2007 (Press Release 08-096).

The manner in which this issue is being handled raises the following additional questions:

- What factors prompted Doyon-Emerald to request that the Doyon-Emerald / ABS contract be modified to eliminate the requirement to make independent recommendations?
- Why are the members of the public who have been encouraged to participate in the review of the ARA methodology having such a difficult time learning whether the project recommendations function is being changed?
- Should the public have confidence in the results of a supposedly independent risk assessment when the independent contractor is relieved of tasks that are “of concern to industry owners/operators”?

#### **Failure to Base Risk Analysis on Verified Field Data**

A significant portion of the meeting in Anchorage May 5 was devoted to the difficulties that ADEC and Doyon-Emerald / ABS have encountered in their efforts to secure from industry access to data and facilities. Apparently the industry has refused to cooperate with the project. Consequently, at this late date the project team is still negotiating to secure access to data. Meanwhile, Doyon-Emerald / ABS and ADEC say they intend to work around this problem by using published reports and aggregate statistical data from other operations to hypothesize the probable effects of hazards which they will not observe and for which they have not been able to obtain real-world data. Although the proposed methodology is supposed to be complete, it emerged from discussion in Anchorage May 5 that it is not entirely clear how the ARA team will obtain data, confirm whatever data it obtains or graft its generalized probabilities onto the realities of the Alaska infrastructure's operating environment.

In my estimation, the problems of data acquisition and analysis discussed in Anchorage last week are overshadowed by the basic methodological issue I raised in my May 5 preliminary comments – the failure of the ARA to base its analysis and conclusions on observed field work. As stated in my preliminary comments May 5, it is my view that the approach that ADEC and Doyon-Emerald / ABS are attempting to implement severely diminishes the likelihood that this project will get to the heart of the

potential problems that threaten the safety of Alaska oil and gas infrastructure operations.

In sum, discussions in Anchorage May 5 confirmed previous concerns about data acquisition and interpretation while failing to address the more fundamental problem delineated in my preliminary comments. Again 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.

### **Stakeholder Outreach**

Open dialogue is essential to the identification and resolution of problems that might otherwise work against project success. The interchange process also helps bridge the gap between members of the public affected by the risks being evaluated and the technical world of the evaluators. I therefore commend ADEC for its recent outreach efforts, including the prompt posting of my May 5 comments on the proposed ARA project methodology.

At the same time, it remains my view that until recently the public outreach effort and the public review process have been severely hampered by failure to post information in a timely manner. Additionally, the failure to disclose the apparent transfer of responsibility for project recommendations from independent contractor to the state (placing the state in the awkward position of evaluating itself), discussed above, undermines confidence in the public outreach process.

At present, the entry in the "Date" column of the ARA web site "Documents" page displays dates inconsistently. Entries may show the date the document was written, the date it was posted, or the date of the event to which the document refers. To alert participants in the public process to delayed postings when they occur, I recommend that the header for the "Date" column of the documents listed on the "Documents" page be changed to "Date Posted," and the date of posting be shown in that column.

### **Additional Background**

The scope of work section of the state RFP that governs the contract contains the following provision:

“If the State is not satisfied with the contractor’s Final Risk Assessment Design or if the peer or public review indicates significant aversion to the contractor’s methodology and projected design, the State may opt out of Phases 2 and 3 of the project, and may publish a new RFP to select an alternate contractor.”

– *State of Alaska: RFP No. 2008 – 1800 – 7379, March 14, 2008 (Risk Assessment of Alaska’s Oil and Gas Infrastructure), p. 29 (after Phase I, Task 5, Final Risk Assessment Design)*

It is my understanding that this project has consumed approximately \$2.0 million of its \$4.1 million total to date.<sup>5</sup>

### **Conclusions**

1. ADEC and Doyon-Emerald / ABS have failed to recognize the need for independent assessment of government efforts that will identify and close gaps in the government regulatory web to assure that processes such as training, management of change, quality control and quality assurance are functioning in the field to support safe maintenance and operations.

2. ADEC and Doyon-Emerald / ABS failed to recognize the importance of unlimited access to facilities, documents and data (a) to determine that potential problems are correctly recognized and (b) to assure that risk mitigation measures are actually (i) in place and (ii) implemented in a timely manner, rather than promised.

3. ADEC and Doyon-Emerald / ABS failed to recognize the importance of identifying and mitigating risks created by human error, and to recognize that mistakes classified as human error that may place safety, the environment and revenue flows at risk are most liable to occur when workers are overworked, confronted by the simultaneous occurrence of problems or stressed by other factors.

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<sup>5</sup> I have not seen official figures.

4. Although ADEC initially ruled that Doyon-Emerald's ties to industry did not pose a conflict of interest, Doyon-Emerald's close relationships with the petroleum industry may have prevented the consultants from recognizing the significance of the three preceding conclusions and the need to assure independent field inputs and quality checks to prevent statistical project results from GIGO contamination.

### **Recommendation**

The ARA was conceived in response to BP's corrosion problems in 2006 at Prudhoe Bay, where the oil spills and shutdown of the nation's largest oil field resulted from poor management, abetted by lax government oversight.<sup>6</sup> Due to the shortcomings in the risk assessment methodology summarized in the conclusions above, the Doyon-Emerald / ABS project is not likely to reveal the potential operational and environmental risks associated with Alaska petroleum production and onshore transportation. For this reason, I recommend that this RFP should be terminated at the close of Phase I. The information assembled to date should be applied to a new assessment. With a revised focus on field inputs and independent evaluation, the new project will have a better chance of making meaningful contributions to risk mitigation efforts than continuing the current project under the Doyon-Emerald / ABS proposed methodology.

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<sup>6</sup> For this writer's reports on management and oversight issues associated with BP's 2006 corrosion problems at Prudhoe Bay, see: "[BP North Slope Spill Reveals a History of Substandard Performance.](#)" March 15, 2006; "['Shocking?' Evidence Mounts from Alaska and Elsewhere that BP's Inadequate North Slope Performance Should Have Been No Surprise to Public Officials or Monitors.](#)" Sept. 3, 2006; and "[BP's Problems: Chronology of Events Affecting Alaska Petroleum Operations Since September 2006 Hearings.](#)" May 15, 2007 (reports prepared for the Alaska Forum for Environmental Responsibility and Alaska Wilderness League).

**Exhibit I.**

This e-mail string documents that:

- On Sept. 3, 2008, ARA Contractor Doyon-Emerald / ABS requested that the ARA task of making recommendations be dropped from the project deliverables;
- the project's original scope requirement that the contractor make recommendations regarding " increased oversight or regulation" was of concern to industry owners/operators and that ADEC was therefore considering transferring this function to the state; and
- at least one ADEC staffer appears to have recognized that if the state took over this function, ADEC would be in the awkward position of making recommendations/conclusions on itself.

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**From:** Rosen, Ira (DEC)

**Sent:** Thursday, September 04, 2008 1:09 PM

**To:** Harwood, Dennis L (DEC); Allen, David L (DEC); Schorr, Betty J (DEC); Dietrick, Larry V (DEC)

**Subject:** RE: MOC Documentation

Risk assessment is a systematic approach used to evaluate the level of safety of a complex system. Assessing risk involves addressing three key questions:

What can go wrong?

How likely is it?

What are the impacts?

The steps are identifying the hazards or creating risk scenarios, determining the likelihood of their occurrence and identifying their consequences.

The consultants main function is to accomplish the above and present their results in a risk profile. I expect this to look like a matrix with areas of low risk and areas of high risk. The final step, what to do with these results is what we are talking about here. The original scope had the consultant making a recommendation which categorized mitigation measures into three groups, physical changes to the infrastructure, changes to business practices or *increased oversight or regulation*. The last item is of concern to industry owners/operators. Rather than have this as part of the report, which the owners will have no direct input into, the current thinking is to leave that to the state.

But to answer your question directly, I guess it is possible that the study could uncover an area where DEC needs to modify some practice. If it does, then we should.

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**From:** Harwood, Dennis L (DEC)

**Sent:** Thursday, September 04, 2008 12:36 PM

**To:** Rosen, Ira (DEC); Allen, David L (DEC); Schorr, Betty J (DEC); Dietrick, Larry V (DEC)

**Subject:** RE: MOC Documentation

I thought the reason we were doing the risk assessment was to have this company make recommendations. If one of the items in the design is to check oversight, as was discussed in one of our meetings, won't DEC be making recommendations/conclusions on ourselves?

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**From:** Rosen, Ira (DEC)

**Sent:** Thursday, September 04, 2008 10:19 AM

**To:** Harwood, Dennis L (DEC); Allen, David L (DEC); Schorr, Betty J (DEC); Dietrick, Larry V (DEC)

**Subject:** FW: MOC Documentation

I think I've mentioned this to you all already but here is the recap.

I have asked for two changes:

I requested that the project schedule be refined by adding another level of detail. That will make the schedule a much more useful tool for both Emerald and me.

Per internal discussions, I asked that the task to Recommend Mitigation Measures be taken out. The recommendations will come from the State.

If I hear no objections, I will approve the MOC and send copies to David and Dennis.

**From:** Bettina Chastain [mailto:BChastain@emeraldalaska.com]  
**Sent:** Wednesday, September 03, 2008 6:07 PM  
**To:** Rosen, Ira (DEC)  
**Cc:** Gretchen Grekowitz  
**Subject:** MOC Documentation

Ira –

Attached you will find the documentation for the MOC which we have discussed and which was outlined in my email of last week. This MOC includes required changes for adding detail to the approved Project Schedule, a request for additional resources on the approved Project Roster and the change to eliminate the need for us to develop Recommendations as part of our final deliverable.

Please let me know if you have any questions.

Again, I will be out of the office and out of touch through the 22<sup>nd</sup>, but Gretchen will be handling the day to day management of the project in my absence, with Brad taking the lead on finalization of the stakeholder consultation planning.

I will see you on the 23<sup>rd</sup>. I am available via email over the next couple of weeks if you need to be in touch.

Thanks,  
Bettina

**Bettina S. Chastain, P.E.**  
President & General Manager

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