

**AMCHITKA ISLAND LONG-TERM STEWARDSHIP WORKSHOP:
Identifying key science issues and research priorities**

Sponsored by

the University of Alaska CRESP II Regional Center

February 12-14, 2002

Princess Hotel, Fairbanks, Alaska

(Version 1/22/02; subject to change)

Statement of purpose

The Consortium for Risk Evaluation with Stakeholder Participation (CRESP) seeks to move forward the implementation of proper stewardship of the Amchitka Underground Test Area by drawing on the expertise of the academic community. This contribution is intended to supplement work ongoing by the US Department of Energy (DOE) and the State of Alaska in defining and assessing the risk of radionuclide transport to the environment. A three-day workshop is planned to guide research activities by answering the following questions:

Are the data presently available adequate to decide the scope of stewardship and, if monitoring is required, are the data sufficient to design a monitoring program?

If not, what basic data need to be collected?

What are the relative priorities of the identified data needs?

Given CRESP's expertise and capabilities, what is a proper role for CRESP in conducting this research?

February 11

Arrival at Princess Hotel

February 12

7: 30 Registration begins (e.g., pick up name tags and final agenda, pay registration fee)

8:00 Introduction – John Eichelberger, University of Alaska Fairbanks (UAF)

- 8:10 Purpose of meeting – Charles W Powers, CRESP II PI
- 8:30 The task before us: Stewardship of nuclear sites - Thomas Leschine, University of Washington

Session I: Amchitka in context (John Eichelberger & David Kosson, Chairs)

- 9:00 Arctic context: The general problem of nuclear contamination in the arctic and subarctic – Lawrence Livermore National Laboratory (LLNL)
- 9:20 How we got here: Why the Amchitka site was chosen and what tests were conducted – Lee Younker, LLNL
- 9:40 Pre- and early post-test evaluations of the environment and human health (DOE)
- 10:00 Break
- 10:20 A history of radiological assessments – Doug Dasher, Alaska Department of Environmental Conservation (ADEC)
- 10:40 Overview of CRESP-funded activities thus far – David Barnes, UAF
- 11:30 Ongoing DOE-funded work: Hydrological model and risk assessment – Desert Research Institute
- 12:00 Lunch (catered, in hotel)

Session II: Stakeholders and stewardship (Robert Perkins & Doug Dasher, Chairs)

- 1:00 A history of public involvement – Robert Perkins, UAF
- 1:15 How local Alaska Native communities view the Amchitka issue – Bob Patrick, A/PIA; Dora Johnson, Nikoliski; Ray Golodoff, Atka
- 1:45 Environmental concerns – Pam Miller, Alaska Community Action on Toxics
- 2:00 Panel discussion (one representative from each federal and state agency): Regulatory context of and expectations for long-term stewardship at Amchitka – begins with 5 to 10-minute statement by each panel member, including representatives of DOE, US Fish and Wildlife Service (USFWS), ADEC, and Alaska Department of Health and Social Services (ADHSS)
- 3:30 Break

Session III: Lessons from elsewhere (David Barnes, chair)

- 3:45 State of knowledge of subsurface conditions at underground test sites (LLNL)
- 4:00 Crustal structure and processes in the fore-arc region of island arcs (Jennifer Reynolds, UAF)

- 4:15 Studies at the French Pacific test site (Doug Dasher, ADEC)
- 4:30 Modeling and monitoring contaminant transport in fractured media (Charles Carrigan, LLNL)
- 4:45 Submarine discharge of groundwater to coastal waters (Mark Baskaran, Wayne State University)
- 5:00 Biological pathways (TBD)
- 5:15 Current sources of risk information (Robert Perkins, UAF)
- 5:30 Adjourn
- 6:00 – 8:00 Reception at University of Alaska Museum (shuttle from and to hotel provided)
- 8:00 Dinner on own

February 13

Session IV: Identification of data needs (John Kelley, Chair)

- 8:00 Panel discussion: What we know and what we need to know

Panelists: UAF/CRESP researchers Jeff Freymueller (geophysics), David Barnes (hydrology), Sathy Naidu (marine geology), Zygmunt Kowalik (oceanography), Mark Johnson (oceanography), Stephen Jewett (biology), Kari Hamrick (human health), John Kelley (radioecological assessment)

Each panelist begins with 5-10 minute statement of their view of current state of knowledge and what research they believe is needed. The panel will then discuss: How may observations, interpretations and approaches used elsewhere be applicable to the Amchitka problem? In what ways is Amchitka unique, so that we will be breaking new ground and need new observations or approaches?

- 10:00 Charge to breakout groups – John Kelley, Chair
Break-out groups meet separately
 1. Solid earth geophysics and contaminant transport:
Charles Carrigan, chair; David Barnes, reporter
 2. Marine science and ecology:
John Kelley, chair; Mark Baskaran, reporter
 3. Human health:
Carl Hild, chair; Ian Hamilton, reporter
 4. Stakeholder participation:
Susan Todd, chair; Robert Perkins, reporter

- 12:00 – 1:00 Lunch, catered in hotel
- 3:00 Report from Group #1, Solid earth geophysics and contaminant transport
- 3:30 Report from Group #2, Marine science and ecology
- 4:00 Report from Group #3, Human health
- 4:30 Report from Group #4, Stakeholder participation
- 5:00 Adjourn
- 6:30 Dinner at Princess Hotel, evening speaker: A history of the Aleutians (Dr. Rick Knecht, Director, Museum of the Aleutians)

February 14

Session V: Developing a scientific plan (Lee Younker & John Eichelberger, Chairs)

- 8:00 Panel discussion: Comments from community, government, and science representatives on what they have heard and what they view as the proper course of action; begins with 5 minute statement from each panelist. Representatives from A/PIA, ADEC, ADHSS, Alaska Department of Natural Resources, CRESPII, DOE, USFWS, Aleutian village(s), national laboratory.

Discussion by entire group on each of the following:

- 10:00 Geophysics needs
- 11:00 Marine science and ecology
- 12:00 Lunch, catered in hotel
- 1:00 Human health
- 2:00 Stakeholder participation
- 3:00 Potential synergy with other federal and state efforts
- 4:00 Synthesis: Summary answers to basic questions in statement of purpose
- 4:30 Closure: Action items
- 5:00 Adjourn