Presentation to the Aleut Adak Community June 2004 By

Charles W. Powers



CRESP II Consortium for Risk Evaluation with Stakeholder Participation 23 people, mostly strangers, from an organization called CRESP came to Adak by both and plane over the past 3 days

Who are these people?

What are they doing, where are they going

Why are they doing it

Does it matter to you?

The Bering Sea and the Aleutian chain are extremely rich and diverse and supports migratory seabirds, marine mammals and pelagic fish.



The region is tectonically active. The western Aleutian region, where the North Pacific plate subducts obliquely beneath North America at 7-8 cm/year, is one of the most volcanically and seismically active regions of the world. It was for the reason of high seismic activity that Amchitka was first selected for the 80 kt *Long Shot* test.



Map of Amchitka Island showing the approximate location of each nuclear test and faults

AMCHITKA INDEPENDENT ASSESSMENT SCIENCE PLAN

Prepared for the Interagency Amchitka Policy Group



June 24, 2003

CRESP Amchitka Oversight Committee

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David Barnes, PhD CRESP-University of Alaska Fairbanks

> Joanna Burger, PhD CRESP-Rutgers University

Lawrence K. Duffy, PhD CRESP-University of Alaska Fairbanks

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www.cresp.org/AmchitkaSciencePlan.pdf

The Science Plan

was requested in a Letter of Intent (LOI) for Amchitka Island signed by the State of Alaska, Department of Environmental

Conservation (ADEC) and U.S. Department of Energy.

The Plan was subject to approval by ADEC, NNSA/NV, the US Fish and Wildlife Service (USF&WS), and the Aleutian and Pribilof Islands Association (A/PIA).

The work will be managed independently by CRESP.









Collaborative Meetings with A/PIA – Summers 2003-2004

Adak(June 2004)Atka(Aug 2003)Nikolski(Aug 2003)Unalaska(Aug 2003)



Discuss: PLAN SPECIES CONCERNS



Nikolski



Expedition I (12 – 22 June 2004) Safety of Environment Physical Data to Inform Biological Sampling – Bathymetric Data - Conductivity Data – Magnetotelluric Data **Expedition II** (27 June – about 20 July) **Biological Sampling** – Marine Ecosystem – Aleut foods - Commercial Fisheries Sample preparation

Expedition III (16 July - 9 August) Biological Sampling - Fisheries





Bioconcentration Biomagnification Possible Risk

Through the process of bioaccumulation, bioconcentration and biomagnification, radionuclides can move through the food chain to higher trophic levels, Including humans. Concern should include not only present and future risk to receptors, but existence values and Intergenerational factors.

