ALASKA LEGISLATURE COMMITTEE FILES 1993-1994 8672
7997 HOUSE RESOURCES

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 8, 1994

FROM: Ruth Peterson

Ruth Peterson

SIGNATURE

P.O. BOX 62020
GOLOVIN, ALASKA 99762
PHONE # (907) 779-2301

As a concerned Subsistence User and Spouse of a salmon permit holder I urge you to lower the chum cap at area M chum from 700,000 to an amount that will not endanger the Salmon Species. I also suggest that Kay Andrews and Tom Bower be removed from the Board of Fish. Thank you for your consideration on these matters.

Ruth Peterson

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

Pom

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 5, 1994

FROM: Harry V. Boone

Harry V. Boone
SIGNATURE
P.O. BOX 62102 Rural Route
GOLOVIN, ALASKA 99762
PHONE # (907) 779- N/A

Mr. Dick Bower and Ms. Kay Bower hold the Boston and Fisheries Board members immediately placed themselves to State Law on basis on Conflict of Interest. Do not Except

Subsistence fisheries in past years before our Permitting process showed that our 2 main fish Tributaries, habitat and Spawning Grounds and due to our Respect of Nature had once been Enormous throughout our 4 seasons.

Place a Cap enhances our Rivers once again Run in full Strength.

Subsistence Fisheries Should be #1 priority. Thank you for allowing the time and effort in making our true concerns Known!

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 5, 1994

FROM: Dean Sockpealuk

Dean Sockpealuk
SIGNATURE
P.O. BOX 62002
GOLOVIN, ALASKA 99762
PHONE # (907) 779- 3251

I would like to see Kay Andrews & Dick Bowker removed from the Board of Fish. We have the right to retain our Subsistence rights.
Also I would like to see Area M reduced to 300 thousand.

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 5, 1994

FROM: Mary Lou Annaktuvluk

Mary Lou Annaktuvluk
SIGNATURE
P.O. BOX 62052
GOLOVIN, ALASKA 99762
PHONE # (907) 779- 3141

Please remove Kay Andrews & Dick Bower from the Board of Fish & Let us have a Representative on the Board of Fish from our area. We need to revive our fisheries. Put regulations on Area M. They have enough fish to supply all of Alaska & more.

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 5, 1994

FROM: Darrell A. Amarok Sr.

Darrell A. Amarok Sr.

SIGNATURE
P.O. BOX 62061
GOLOVIN, ALASKA 99762
PHONE # (907) 779- 3661

Subsistance is what put food on our tables 90 percent of the time with out this some will go hungry. I urge you Not to take this away from us. Please remove K. Andrews, D Bowers, Larry Edsel from B 'F.

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 08, 1994

FROM: Thomas E Pungak

Thomas E Pungak & Katherine A. Pungak

SIGNATURE
P.O. BOX 62091
GOLOVIN, ALASKA 99762
PHONE # (907) 779-3624

It is APPARENT that MR BOWER and MR HIDDEN are NOT interested in following the letter of the law- rather listening to and pandering to the financial interests of the False pass fishermen. Please consider seriously the seriousness of the chum Salmon disaster of the northern districts where our seasons and subsistence fisheries have been cut or in some cases Eliminated. We need to fish too — both commercially and for subsistence. 700,000 chums are not reaching us — thanx to False Pass bycatch — IT is proven!!

Thank

CHINIK ESKIMO COMMUNITY
P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 8, 1994

FROM: CAROL OLIVER

Carol Oliver
SIGNATURE

P.O. BOX 62014
GOLOVIN, ALASKA 99762
PHONE # (907) 779-3251 779-2209 (home)

I HOPE THAT YOU WILL LISTEN TO OUR PEOPLE & USE YOUR AUTHORITY AS GOVERNOR TO SEE THAT OUR FISHERY RESOURCES ARE GIVEN THE MUCH NEEDED CONSERVATION MEASURES: WE HAVE BEEN ASKING FOR FAIR REPRESENTATION ON THE BOARD OF FISH & ASK AGAIN THAT KAY ANDREWS & DICK BOWER BE REMOVED. CUT DOWN AREA M'S IN TAKE: THEY PROUDLY SAY THEY HAVE RECORD CATCHES & HERE WE SIT WITH A RAPIDLY DECLINING RESOURCE/ECONOMY. GAS: $2.75 gallon OIL: $113.95 drum PROPANE: $130.00 ROUND TRIP AIRFARE TO NOME: TO SHOP OR FOR MEDICAL $100. WITHOUT A STORE, IT ISN'T EASY. WE NEED OUR SUBSISTENCE FISH. THANK YOU.

P.O. BOX 62020
GOLOVIN, ALASKA 99762 (907) 779-2214

Pum

TO: GOVERNOR HICKLE & ALL ALASKA STATE LEGISLATURES APRIL 5, 1994

FROM: Robert S. AMARDIK
P.O. Box 62011
SIGNATURE
P.O. BOX 62011
GOLOVIN, ALASKA 99762
PHONE # (907) 779-3661

I would like to see Kay Andrew and Dick Bowers Larry Edfa removed from the Board of Fisheries. And reduce AREA M to 300,000 thank you

Robert S. Amardik
President
Chinik Eskimo Comm.
Golovin, AK 99762
office # 779-2214

AVCP

Association of Village Council Presidents
P.O. Box 219 • Bethel, Alaska 99559 • Phone 543-3521

April 8, 1994

Governor Walter J. Hickel
Office of The Governor
P.O. Box 110001
Juneau, Alaska 99811-0001

Re: Board of Fisheries, Kay Andrews, Dick Bowers

Dear Governor Hickel:

In light of the recent votes cast by the two (2) individuals, Kay Andrews and Dick Bowers at the Board of Fisheries meeting, we request that you withdraw Kay Andrews and Dick Bowers from the Board of Fisheries.

They cast their votes against the recommendation of ADF & G, and as a Chairperson, Kay Andrews allowed personal attacks against the Commissioner of ADF & G by persons testifying at the meeting.

Your withdrawal of the two named individuals would support your stance on conserving the resources - Chum Salmon!

Thank you for your immediate attention to the matter.

Sincerely,

ASSOCIATION OF VILLAGE COUNCIL PRESIDENTS
Willie Kasayulie, Chairman

Myron P. Naneng, Chairman

cc: Senate Resource Committee
House Resource Committee

Art Nielsen

KAWERAK, INC.

P.O. BOX 948 • NOME, ALASKA 99762

TELEPHONE: (907) 443-5231 • FAX: (907) 443-3708

SERVING THE VILLAGES OF:

BREVIG MISSION
COUNCIL
DIOMEDE
ELIM
GAMBELL
GOLOVIN
KING ISLAND
KOYUK
MARY'S IGLOO
NOME
SAVOONGA
SHAKTOOLIK
SHISHMAREF
SOLOMON
STEBBINS
ST. MICHAEL
TELLER
UNALAKLEET
WALES
WHITE MOUNTAIN

March 31, 1994

The Honorable Walter J. Hickel
State of Alaska
P.O. Box A
Juneau, AK 99811-0101

Dear Governor Hickel,

We are writing to protest the decision reached by the Alaska Board of Fisheries to keep the Area M chum bycatch cap at 700,000. Commissioner Rosier and ADF&G staff strongly recommended the chum cap be reduced to 300,000. Their recommendation was based on a concern for the conservation of chum salmon stocks in Western Alaska that was supported by biological data. Norton Sound chum stocks are so low in some areas that it is questionable whether they will recover. Because of this situation, subsistence needs are not being met in Norton Sound and other parts of western Alaska. This has caused extreme hardship on our people. Commissioner Rosier and staff told the Board of Fisheries many times that residents of western Alaska were not able to meet their subsistence needs. Since the Board did not act responsibly, we are asking your assistance to remove Kay Andrew, Board Chair, and Dick Bowers, new Board member.

Norton Sound residents have shown their willingness time and again to follow regulatory measures which we were told were necessary to maintain chum stocks. Yukon and Kuskokwim residents relayed the same message. The AYK commercial fisheries were closed or greatly restricted but we complied. Our subsistence fisheries were closed. Yet the Board refused to reduce the chum bycatch for Area M commercial fishermen. It is quite apparent that the Board of Fisheries is in violation of its own mixed stock policy and the constitutional mandate to first, protect conservation of chum salmon and second to ensure the subsistence use priority.

Commissioner Rosier, Dr. Eggers and Mr. Koenings all stated that a reduced Area M chum cap would help to rebuild Norton Sound chum. They stated the number of fish that would return to Norton Sound would be statistically

could not justify the economic impacts a reduced chum cap would have on Area M commercial fishermen.

The delegation of AYK representatives who attended the meetings and testified that they endured overwhelming cultural, economic, and social hardships because of the 1993 chum crash. Norton Sound residents have been for a much longer period. Now it seems that little will be done to prevent the chum interceptions occuring hundreds of miles away in Area M, and more restrictions are going to be placed upon the subsistence and commercial fishermen of Norton Sound, creating further hardships.

Kay Andrew, Board Chair, proved she is incapaple of providing leadership to the Board of Fisheries, and in fact, does not know how to facilitate a meeting. Andrew seemed to be "baiting" people who testified with inappropriate questions and attacked the Commissioner and department staff. She allowed individuals to be insulted, and generally behaved in an unprofessional manner. Her final comments before the vote on the chum cap were worded to the extent which put commercial fishing economics before sustained yield and the subsistence priority. No fishery, no matter how lucrative, should supercede the sustained yield clause and the subsistence use priority.

Mr. Bowers did not seem to grasp the importance of conserving our chum salmon stocks, and the subsistence priority. He was confused as to how he was voting, and we feel that in the long run, Mr. Bowers will do long term harm to Alaska's fisheries.

We, the undersigned, strongly urge you to remove both Mrs. Kay Andrew and Mr. Dick Bowers from the Alaska Board of Fisheries. They proved by their voting record that Alaska's fisheries and Alaska residents will suffer if they are allowed to remain on the Board. We await your reply.

Respectfully,
KAWERAK INCORPORATED

Stanton Katchatag, Chair
Kawerak Board of Directors

Native Village of Wales

Brevig Mission Traditional Council

Council Traditional Council

Native Village of Diomede

Native Village of Elim

Native Village of Gambell

Chinik Eskimo Community

Mary's Igloo Traditional Council

King Island Native Community

Native Village of Koyuk

Nome Eskimo Community

Native Village of Savoonga

Native Village of Shaktoolik

Native Village of Shishmaref

Stebbins Community Association

Native Village of St. Michael

Native Village of Teller

Native Village of White Mountain

Native Village of Solomon

KAWERAK, INC.

P.O. BOX 948 • NOME, ALASKA 99762

TELEPHONE: (907) 443-5231 • FAX: (907) 443-3708

SERVING THE VILLAGES OF:

BREVIG MISSION
COUNCIL
DIOMEDE
ELIM
GAMBELL
GOLOVIN
KING ISLAND
KOYUK
MARY'S IGLOO
NOME
SAVOONGA
SHAKTOOLIK
SHISHMAREF
SOLOMON
STEBBINS
ST MICHAEL
TELLER
UNALAKLEET
WALES
WHITE MOUNTAIN

April 4, 1994

The Honorable Robin Taylor
Room 30
State Capitol
Juneau, AK 99801-1182

Dear Senator Taylor,

I am writing to express my grave concern on the outcome of the March 21 Board of Fisheries meeting to address the Western Alaska chum crisis. After attending the meetings and witnessing their deliberations, it quickly became apparent that three members of the Board put economics over conservation and sustained yield. In light of the fact that Kay Andrew, Dick Bowers, and Larry Edfelt were derelict in their duties as Board of Fisheries members, I strongly urge you not to confirm Andrew and Bowers, and not to re-confirm Edfelt.

The Board was shown the numbers of chum salmon that would be "saved" in the False Pass fishery by Dr. Eggers of ADF&G, and were told in testimony and staff reports that even a small increase in the returns of chum salmon to Norton Sound would be statistically significant. The Board chose to ignore this significance, and it appears that it will again be business as usual for the Area M fishermen, with still more restrictions being placed on the subsistence and commercial fishermen of Norton Sound. Even With commercial fishing completely closed and subsistence dramatically curtailed in some areas of Norton Sound, the chum salmon are still not returning. It seems that the Board's approach to this problem is to keep placing the restrictions upon local fishermen, and the fish will magically re-appear.

The Board of Fisheries meetings, chaired by Mrs. Kay Andrew, were conducted in a completely inappropriate manner. Mrs. Andrew attacked Commissioner Rosier and some members of ADF&G staff, and asked inappropriate questions to people after their testimonies. Mrs. Andrew's final comments before the Board voted on the chum cap basically said that she could not justify the economic impacts upon the commercial fishermen of Area M, to put more chum salmon into the rivers of Western Alaska.
My question to Mrs. Andrew is, "what about the economic impacts that you have already placed upon the commercial fishermen, and more importantly the subsistence fishermen of Norton Sound?"

KAWERAK, INC.

P.O. BOX 948 • NOME, ALASKA 99762

TELEPHONE: (907) 443-5231 • FAX: (907) 443-3708

SERVING THE VILLAGES OF:

BREVIG MISSION
COUNCIL
DIOMEDE
ELIM
GAMBELL
GOLOVIN
KING ISLAND
KOYUK
MARYS IGLOO
NOME
SAVOONGA
SHAKTOOLIK
SHISHMAREF
SOLOMON
STEBBINS
ST MICHAEL
TELLER
UNALAKLEET
WALES
WHITE MOUNTAIN

Board member Larry Edfelt has consistently opposed our cause. Mr. Eldelt always tends to vote for big fishing industries, and against the smaller, terminal fisheries. Mr. Edfelt does not acknowledge the subsistence priority, and at the last Board meeting, did not vote for the sustained yield principle.

Another Board member, Mr. Dick Bowers, seemed to be out of touch with the concerns of the people from Western Alaska during public testimony. He seemed to appreciate the fact that many elders from the various regions appeared at the meetings to give testimony, however, Mr. Bowers failed to realize that the residents of Norton Sound are facing the loss of their traditional lifestyle, should the chum salmon runs continue to decline.

Commissioner Rosier and ADF&G staff should be commended for their willingness to take action and help preserve these dangerously low populations of chum salmon. Northern Norton Sound has nine out of the thirteen streams which the Department of Fish and Game identified as "conservation concerns" in Western Alaska. The Board, however, failed to see the magnitude of this problem when they voted not to reduce the chum cap in Area M.

Again, more restrictions have been placed on the commercial and subsistence fishermen of Norton Sound, with drastic commercial closures and even subsistence closures. These restrictions have not proved to be effective. A scientific correlation has been shown between the status of the Western Alaska chum salmon, and the chum harvest at False Pass. Western Alaska has done it's share of conservation, and only asks the same for False Pass.

I urge you, Senator Taylor, not to confirm Kay Andrew and Dick Bowers, and not to re-confirm Larry Edfelt on the Board. Their actions during the March meetings were not in the interests of preserving the salmon runs of Western Alaska for future generations. They failed to uphold the State's sustained yield and subsistence priority policies. I await your reply.

Respectfully,

Arthur Nelson
Fisheries Specialist

29	TO	TESTIFY				TSFY. ALL ITEMS
30	TO	TESTIFY				TSFY. ALL ITEMS

PARTICIPANTS IN:KETCHIKAN KTN

1 MR.	DONALD	WESTLUND				TSFY. FISHERIES, GA
	PO BOX 7883		KETCHIKAN	AK	99901	(907)225-9319
2 MR.	BRIAN	WARMUTH				TSFY. FISHERIES, GA
	PO BOX 6342		KETCHIKAN	AK	99901	(907)225-0432
3 MR.	ROBERT	JAHNKE				TSFY. FISHERIES, GA
	PO BOX 991		WARD COVE	AK	99928	(907)247-8267

PARTICIPANTS IN:KETCHIKAN KTN

4 MS.	KAY	ANDREW				TSFY. FISHERIES, GA
	PO BOX 7211		KETCHIKAN	AK	99901	(907)225-2463
5 MS.	KATIE	FISHER				TSFY. FISHERIES, GA
	PO BOX 8052		KETCHIKAN	AK	99901	(907)225-7688
6 MR.	NEVIN	MAY				TSFY. FISHERIES, GA
	PO BOX 3160		KETCHIKAN	AK	99901	(907)247-4685
7 MR.	HAROLD	HELFRICH				TSFY. FISHERIES, GA
	PO BOX 6278		KETCHIKAN	AK	99901	(907)225-4058
8 MS.	MARY	HELFRICH				TSFY. FISHERIES, GA
	PO BOX 6278		KETCHIKAN	AK	99901	(907)225-4058
9 MR.	DAVID	BRAY				TSFY. FISHERIES, GA
	2729 TONGASS AVE		KETCHIKAN	AK	99901	(907)225-3505
10 MR.	ROLLO	BRAY				TSFY. FISHERIES, GA
	2729 TONGASS AVE		KETCHIKAN	AK	99901	(907)225-3505
11 MR.	AL	WICKENS				TSFY. FISHERIES, GA
	PO BOX 9465		KETCHIKAN	AK	99901	(907)225-7623
12 MR.	GREG	RICE				TSFY. FISHERIES, GA
	200 MATTLE ROAD		KETCHIKAN	AK	99901	(907)225-3093
13 MR.	KEN	DUCKETT				TSFY. FISHERIES, GA
				AK		(907)000-0000

PARTICIPANTS IN:MATSU MAT

1 MR.	LARRY	ENGEL				TSFY. FISHERIES, GA
	PO BOX 197		PALMER	AK	99645	(907)745-4132
2 MR.	FRANK	CHARLES				TSFY. FISHERIES, GA
	PO BOX 927		BETHEL	AK	99559	(907)543-2608
3 MS.	PAGE	HERRING				TSFY. FISHERIES, GA
	PO BOX 878837		WASILLA	AK	99687	(907)376-7243

PARTICIPANTS IN:NOME NOM

1 MR.	ARTHUR	NELSON	KAWERAK			TSFY. FISHERIES, GA
	BOX 948		NOME	AK	99762	(907)443-5231
2 MS.	EILEEN	NORBERT	KAWERAK			TSFY. FISHERIES, GA
	BOX 948		NOME	AK	99762	(907)443-5231
3 MS.	LORETTA	BULLARD	KAWERAK			OBSV. FISHERIES, GA
	BOX 948		NOME	AK	99762	(907)443-5231

PARTICIPANTS IN:SITKA SIT

1 MR.	PETE	ESQUIRO	NSRAA			OBSV. ALL ITEMS
	1308 SAWMILL CREEK RD.		SITKA	AK	99835	(907)747-6850

PARTICIPANTS IN:PORT ALEXANDER SIT PTA

1	DEBBIE	GIFFORD				TSFY. CONFIRMATION
	BOX 8125		PT. ALEXANDER	AK	99836	(907)568-2244
2	DENNIS	LONGSMITH				TSFY. CONFIRMATION
	BOX 8066		PT. ALEXANDER	AK	99836	(907)568-2243

PARTICIPANTS IN:KEN/SOL SOL

1 MR.	DALE	BONDURANT	SELF			TSFY. FISHERIES, GA
	HC1 BOX 1197		SOLDOTNA	AK	99669	(907)000-0000
2 MR.	DICK	BOWER	CONFIRMEE			OBSV. FISHERIES, GA
	PO BOX 3662		SOLDOTNA	AK	99669	(907)262-7132
3 MR.	BEN	ELLIS	KENRVRSPRTFISH			TSFY. FISHERIES, GA

PARTICIPANTS IN:KEN/SOL SOL

	PO BOX 1228		SOLDOTNA	AK	99669	(907)262-8588
4 MR.	BUD	HARRIS	UCIDA			OBSV. FISHERIES, GA
	PO BOX 7013		NIKISKI	AK	99635	(907)776-8768
5 MR.	KARL	KIRCHER	KPFA			TSFY. FISHERIES, GA
	PO BOX 95		KASILOF	AK	99610	(907)262-2519
6 MR.	JOSEPH	JOLLY	UCIDA			TSFY. FISHERIES, GA
	HC02 BOX 753		SOLDOTNA	AK	99669	(907)283-9505
7 MR.	JEFF	KING	SELF			OBSV. FISHERIES, GA
	PO BOX 2711		SOLDOTNA	AK	99669	(907)262-4564
8 MR.	BOB	BONDURANT	SELF			OBSV. FISHERIES, GA
	HC1 BOX 1197		SOLDOTNA	AK	99669	(907)000-0000
9 MS.	CONNIE	GATLING	KPFA			OBSV. FISHERIES, GA
	34824 K-BEACH RD.		SOLDOTNA	AK	99669	(907)262-2492

TCN: 40647 DATE & TIME: 04/13/94 08:15 TO 10:00 STATUS:6 ADJOURNED

**** ORDER SUMMARY ****
SPONSOR: HRES HOUSE RESOURCES CHAIRS: WILLIAMS
PURPOSE: PUB PUBLIC HEARING LEGISLATIVE
CONTACT: MARY MCDOWELL TEL#: (907)465-3715
CHAIRING SITE: JUNEAU CAPITOL CAP124

SPONSOR REMARKS(PUB): TESTIMONY:Y ALLOWED 3 MINUTE LIMIT
TESTIMONY WILL BE TAKEN WITH A 3 MINUTE LIMIT.
TCN REQUESTED ON 04/13/94 AND HAS 4 UPDATES

**** AGENDA ****
1 CONFIRMATION HEARING FOR GOVERNOR'S APPTS
2 TO FOLLOWING BOARDS AND COMMISSIONS:
3 FISHERIES, GAME, BIG GAME COMMERCIAL SERV
4 ICES BOARD, COMMERCIAL FISHERIES ENTRY
5 COMMISSION, OIL AND GAS CONSERVATION
6 COMMISSION

**** PARTICIPATING LIOS ****

	ANC	ANCHORAGE	716 W 4TH., #200		LOCATION STAFF
	BE.	BETHEL	301 WILLOW ST.		LOCATION STAFF
	COR	CORDOVA	705 2ND STREET		LOCATION STAFF
	DLG	DILLINGHAM	KANGIIQUTAQ BLDG		LOCATION STAFF
	FBX	FAIRBANKS	119 N CUSHMAN ST		LOCATION STAFF
*	JNU	JUNEAU	CAPITOL	CAP124	LOCATION STAFF
	KTN	KETCHIKAN	352 FRONT STREET		LOCATION STAFF
	MAT	MATSU	165 E PARKS HWY.		LOCATION STAFF
	NOM	NOME	FRONT STREET		LOCATION STAFF
	PSG	PETERSBURG	101 GJOA STREET		LOCATION STAFF
	SIT	SITKA	210 LAKE STREET		LOCATION STAFF
	SOL	KEN/SOL	34824 KALIFONSKY		LOCATION STAFF

**** VOLUNTEER & OFFNET SITES ****

SIT	PTA	PORT ALEXANDER	VARIOUS HOMES	MIM ROBINSON (907)568-2236
ZZZ	OF1	OFFNET 1	UNALAKLEET	CHARLES SLATSKY (907)999-9999

PARTICIPANTS IN:ANCHORAGE ANC

1	JEFF	PARKER	ASA TU		TSFY.	CONFIRMATION
	1201 HYDER		ANCHORAGE	AK 99501	(907)274-5418	
2	DAN	ALBRECHT	YUKON RIVER FISH		TSFY.	CONFIRMATION
	733 W 4TH. NO 881		ANCHORAGE	AK 99501	(907)279-6519	
3	HENRY	MITCHELL	BERING SEA FISH		TSFY.	CONFIRMATION
	725 CHRISTENSON DR		ANCHORAGE	AK 99501	(907)279-6519	

PARTICIPANTS IN:BETHEL BET

1 PL2	KAREN	SAMUELSON	AVCP		TSFY.	CONFIRMATION
	PO BOX 219		BETHEL	AK 99559	(907)543-3521	
2	MYRON	NANENG	AVCP		TSFY.	CONFIRMATION
	PO BOX 219		BETHEL	AK 99559	(907)543-3521	
3	HAROLD	SPARCK			TSFY.	CONFIRMATION
	PO BOX 267		BETHEL	AK 99559	(907)543-3788	
4	GEOFF	KENNEDY			OBSV.	CONFIRMATION
	POUCH 468		BETHEL	AK 99559	(907)543-3131	

PARTICIPANTS IN:CORDOVA COR

TCN: 40647 DATE & TIME: 04/13/94 08:15 TO 10:00 STATUS:6 ADJOURNED

PARTICIPANTS IN:CORDOVA COR

1 MS.	DORNE	HAWXHURST	CDFU		OBSV.	CONFIRMATION
	PO BOX 939		CORDOVA	AK 99574	(907)424-3447	

PARTICIPANTS IN:DILLINGHAM DLG

1 MR.	ROBIN	SAMUELSEN	BBNA		OBSV.	COMMISSION
	BOX 412		DILLINGHAM	AK 99576	(907)842-2743	

PARTICIPANTS IN:JUNEAU JNU

1 REP	BILL	WILLIAMS		TSFY.	ALL ITEMS
			AK	(907)000-0000	
2 REP	PAT	CARNEY		TSFY.	ALL ITEMS
			AK	(907)000-0000	
3 REP	JEANNETTE	JAMES		TSFY.	ALL ITEMS
			AK	(907)000-0000	
4 REP	JOE	GREEN		TSFY.	ALL ITEMS
			AK	(907)000-0000	
5 REP	CON	BUNDE		TSFY.	ALL ITEMS
			AK	(907)000-0000	
6 REP	JOHN	DAVIES		TSFY.	ALL ITEMS
			AK	(907)000-0000	
7 REP	BILL	HUDSON		TSFY.	ALL ITEMS
			AK	(907)000-0000	
8	TO	OBSERVE		OBSV.	ALL ITEMS
9	TO	OBSERVE		OBSV.	ALL ITEMS
10	TO	OBSERVE		OBSV.	ALL ITEMS
11	TO	OBSERVE		OBSV.	ALL ITEMS
12	TO	OBSERVE		OBSV.	ALL ITEMS
13	TO	OBSERVE		OBSV.	ALL ITEMS
14	TO	OBSERVE		OBSV.	ALL ITEMS
15	TO	OBSERVE		OBSV.	ALL ITEMS
16	TO	OBSERVE		OBSV.	ALL ITEMS
17	TO	OBSERVE		OBSV.	ALL ITEMS
18	TO	OBSERVE		OBSV.	ALL ITEMS
19	TO	OBSERVE		OBSV.	ALL ITEMS
20	TO	OBSERVE		OBSV.	ALL ITEMS
21	TO	OBSERVE		OBSV.	ALL ITEMS
22	TO	OBSERVE		OBSV.	ALL ITEMS
23	TO	TESTIFY		TSFY.	ALL ITEMS
24	TO	TESTIFY		TSFY.	ALL ITEMS
25	TO	TESTIFY		TSFY.	ALL ITEMS
26	TO	TESTIFY		TSFY.	ALL ITEMS
27	TO	TESTIFY		TSFY.	ALL ITEMS
28	TO	TESTIFY		TSFY.	ALL ITEMS

* PLEASE PRINT + INCLUDE + COMPLETE MAILING ADDRESS

HOUSE RESOURCES COMMITTEE

DATE: 4-13-94

PLACE: Capitol, Room 124

SUBJECT OF MEETING:
CONFIRMATION HEARING:
GOVERNOR'S APPOINTEES - BOARDS + COMMISSIONS

NAME	REPRESENTING	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?		WHAT SUBJECT/ WHICH BILL?
George Yaska 853	Tanana Chiefs Confirmation	122 1st Ave., Fbks, AK	99701	452-8251		(Y)	N	BOF Andrew Bower
Geoff Bullock 856	USAG					(Y)	N	BoF confirmations
Chester Durand 9:30	Alaska Sport Anglers Ass	6590 Glacier Hwy #139 Juneau AK	99801	780-6887		(Y)	N	BoF confirmations
Kate Troll 9:31	SEAS			789-5117		(Y)	N	BOF confirmations
Dean Paddock 950	Bristol Bay Driftnetters Assn.	P.O Box 21951 Juneau 99802			463-4970	(Y)	N	Board of Fish
Jerry McCune 954	UFA	211 4st suite 112 JunAK	99801	586-2860		(Y)	N	Board of Fish.
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	

T26 40647 1162 MSG 1 billmsg. 4/13

TCN: 40635 DATE & TIME: 04/11/94 08:15 TO 11:00 STATUS:5 IN PROG.

**** ORDER SUMMARY ****
SPONSOR: HRES HOUSE RESOURCES CHAIRS: WILLIAMS
PURPOSE: PUB PUBLIC HEARING LEGISLATIVE
CONTACT: GAIL TEL#: (907)465-3715
CHAIRING SITE: JUNEAU CAPITOL CAP124

SPONSOR REMARKS(PUB): TESTIMONY:Y ALLOWED 99 MINUTE LIMIT
OTHER SITES MAY ADD
TESTIMONY WILL BE TAKEN
TCN REQUESTED ON 04/11/94 AND HAS 9 UPDATES

**** AGENDA ****
1 CONFIRMATION HEARING FOR GOVERNOR'S APPTS
2 TO FOLLOWING BOARDS AND COMMISSIONS:
3 FISHERIES, GAME, BIG GAME COMMERCIAL SERV
4 ICES BOARD, COMMERCIAL FISHERIES ENTRY
5 COMMISSION, OIL AND GAS CONSERVATION
6 COMMISSION

**** PARTICIPATING LIOS ****

	ANC	ANCHORAGE	716 W 4TH, #200		LOCATION STAFF
	BET	BETHEL	301 WILLOW ST.		LOCATION STAFF
	COR	CORDOVA	705 2ND STREET		LOCATION STAFF
	DLG	DILLINGHAM	KANGIIQUTAQ BLDG		LOCATION STAFF
	FBX	FAIRBANKS	119 N CUSHMAN ST		LOCATION STAFF
*	JNU	JUNEAU	CAPITOL	CAP124	LOCATION STAFF
	KTN	KETCHIKAN	352 FRONT STREET		LOCATION STAFF
	MAT	MATSU	165 E PARKS HWY.		LOCATION STAFF
	NOM	NOME	FRONT STREET		LOCATION STAFF
	PSG	PETERSBURG	101 GJOA STREET		LOCATION STAFF
	SIT	SITKA	210 LAKE STREET		LOCATION STAFF
	SOL	KEN/SOL	34824 KALIFONSKY		LOCATION STAFF

**** VOLUNTEER & OFFNET SITES ****

ZZZ OF1 OFFNET 1	UNKNOWN	KAY ANDREW	(907)999-9999
ZZZ OF2 OFFNET 2	ELIM	JOHN JEMEWOIK	(907)890-2248
ZZZ OF3 OFFNET 3	UNALAKLEET	CHARLES SOXIE	(907)624-3363

PARTICIPANTS IN:ANCHORAGE ANC

1	DAN	ALBRECHT	YUKON RIV FISH	UNABL	CONFIRMATION	
	733 W 4TH, BOX 88;		ANCHORAGE	AK	99501	(907)279-6519
2	TUCKERMAN	BABCOCK	ANSWER QUESTION	TSFY.	CONFIRMATION	
	3001 PORCUPINE DR		ANCHORAGE	AK	99501	(907)274-1433
3	HENRY	MITCHELL	P.S.F.A.	UNABL	CONFIRMATION	
	725 CHRISTENSEN		ANCHORAGE	AK	99501	(907)244-1884

PARTICIPANTS IN:BETHEL BET

1	KAREN	SAMUELSON	AVCP	TSFY.	CONFIRMATION	
	PO BOX 219		BETHEL	AK	99559	(907)543-3521

PARTICIPANTS IN:DILLINGHAM DLG

1 MR.	ROBIN	SAMUELSEN	BBNA	OBSV.	COMMISSION, O	
	BOX 412		DILLINGHAM	AK	99576	(907)842-2743

PARTICIPANTS IN:FAIRBANKS FBX

TCN: 40635 DATE & TIME: 04/11/94 08:15 TO 11:00 STATUS:5 IN PROG.

PARTICIPANTS IN:FAIRBANKS FBX

1	DICK	BURLEY	BOARD OF GAME	TSFY.	CONFIRMATION	
				AK	(907)000-0000	
	TOM	SCARBOROUGH	BOARD OF GAME	TSFY.	CONFIRMATION	
				AK	(907)000-0000	

PARTICIPANTS IN:JUNEAU JNU

1 REP.	BILL	WILLIAMS	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
2 REP.	CON	BUNDE	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
3 REP.	ELDON	MULDER	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
4 REP.	DAVID	FINKELSTEIN	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
5 REP.	JOHN	DAVIES	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
6 REP.	IRENE	NICHOLIA	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
7 REP.	BILL	HUDSON	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
8 REP.	PAT	CARNEY	TSFY.	CONFIRMATION	
			AK	(907)000-0000	
9 REP.	JOE	GREENE	TSFY.	CONFIRMATION	
			AK	(907)000-0000	

PARTICIPANTS IN:KETCHIKAN KTN

1 MR.	DONALD	WESTLUND	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
2 MR.	BOB	JAHNKE	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
3 MR.	BRIAN	WARMUTH	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
4 MR.	ROLLO	BRAY	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
5 MR.	GREG	RICE	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
6 MR.	KENNETH	DUCKETT	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
7 MR.	DAVID	BRAY	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	
8 MR.	DAVID	HASHAGEN	TSFY.	FISHERIES, GA	
			AK	(907)000-0000	

PARTICIPANTS IN:MATSU MAT

1 MR.	FRANK L	CHARLES	TSFY.	FISHERIES, GA		
	PO BOX 927	BETHEL	AK	99559	(907)543-2608	
2 MR.	LARRY	ENGEL	TSFY.	FISHERIES, GA		
	PO BOX 197	PALMER	AK	99645	(907)745-4132	
3 MR.	SCOTT	OGAN	TSFY.	FISHERIES, GA		
	HC 04 BOX 9248	PALMER	AK	99645	(907)376-7243	
4 MS.	PAGE	HERRING	OBSV.	FISHERIES, GA		
	PO BOX 870837	WASILLA	AK	99687	(907)376-7243	

PARTICIPANTS IN:NOME NOM

TCN: 40635 DATE & TIME: 04/11/94 08:15 TO 11:00 STATUS:5 IN PROG.

PARTICIPANTS IN:NOME NOM

1 MR.	ARTHUR	NELSON	KAWERAK, INC.	TSFY.	COMMISSION, O	
	BOX 948	NOME	AK	99762	(907)443-5231	
2 MS.	EILEEN	NORBERT	KAWERAK, INC.	TSFY.	COMMISSION, O	
	BOX 948	NOME	AK	99762	(907)443-5231	

PARTICIPANTS IN:PETERSBURG PSG

1 MR.	STEVE	BERRY	TSFY.	ALL ITEMS		
	BOX 934	PETERSBURG	AK	99833	(907)772-4503	
2 MR.	STAN	MALCOLM	OBSV.	ALL ITEMS		
	BOX 361	PETERSBURG	AK	99833	(907)772-9255	

PARTICIPANTS IN:KEN/SOL SOL

1 MR.	BEN	ELLIS	KENRVRSPORT FISH	UNABL	FISHERIES, GA	
	PO BOX 1228	SOLDOTNA	AK	99669	(907)262-8588	
2 MR.	DICK	BOWER	CONFIRMEE	TSFY.	FISHERIES, GA	
	PO BOX 3663	SOLDOTNA	AK	99660	(907)262-7132	
3 MR.	THEO	MATTHEWS	UCIDA	UNABL	FISHERIES, GA	
	PO BOX 389	KENAI	AK	99611	(907)283-3600	
4 MS.	CONNIE	GATLING	KPFA	OBSV	FISHERIES, GA	
	34824 K-BEACH RD	SOLDOTNA	AK	99669	(907)262-2492	

* PLEASE PRINT + INCLUDE COMPLETE MAILING ADDRESS *

HOUSE RESOURCES COMMITTEE

DATE: 4-11-94

PLACE: Capitol, Room 124

SUBJECT OF MEETING:
CONFIRMATION HEARING
GOVERNOR'S APPOINTEES
BOARDS + COMMISSIONS

NAME	REPRESENTING *	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?		WHAT SUBJECT/ WHICH BILL?
Kate Troll	So. Nwest AK. Seiners	9826 Long Run	99801		789-5117	(Y)	N	Bd of Fish
Eddie GRASSER		Box 1350 Palmer	99645	745-3772		Y	N	Board of GAME
Dean Paddock	Bristol Bay Driftnetters	POB 2197 Juno	9952	~~463-1996~~	463-4970	(Y)	N	Bd of Fish
Jerry McCune	UFA				586-2820	Y	N	Bd of Fish
RICHARD BISHOP	AK. OUTDOOR COUNCIL	1555 GUSS GRIND FAI. AK. 99709		4556151	4556151	(Y)	N	BD FISH BD GAME APPTS.
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	

Confirmation

Johnson,

Fredericks,

Johnston

2-22-93

receipt approved

RESUME

DAVID W. JOHNSTON
320 Mariner Drive
Anchorage, AK 99515

Phone: (907) 345-5450 (Home)
279-1433 (Work)

EXPERIENCE:

Commissioner/Chairman (January 1989 to present)
Alaska Oil and Gas Conservation Commission, 3001 Porcupine Drive, Anchorage, Alaska 99501

Appointed Commissioner January 1989, appointed Chairman November 1990. Manage independent quasi-judicial agency of state responsible for prevention of waste, protection of correlative rights and realization of ultimate recovery. Oversee oil and gas drilling, development and production, reservoir depletion and metering operations on all lands subject to the state's police powers. Administer Underground Injection Control (UIC) program for oil and gas wells. Hold public hearings, adjudicate decisions affecting reservoir depletion and mineral ownership. Represent agency before Legislative hearings and in meetings with other government agencies, concerned organizations and the press. Direct staff of 22, composed of engineers, geologists, field inspectors and support staff; manage budget of $1.8 million.

Serve as Alaska's Associate Representative to the Interstate Oil and Gas Compact Commission. Appointed Chairman of the IO&GCC's Energy Resources Committee, by Governor Bangerter, Utah, in 1990, reappointed by Governor Walters, Oklahoma, in 1991.

Natural Resource Manager (September 1984 to January 1989)
Geologist III (January 1981 to September 1984)
Alaska Department of Natural Resources, Division of Oil and Gas, 3601 'C' Street, Anchorage, Alaska 99510

Managed division's environmental analysis unit for oil and gas leasing. Developed lease stipulations and permit terms, negotiated environmental provisions with other state and local agencies. Oversaw publication of state's Best Interest Findings, ACMP consistency determinations, and Five-Year Oil and Gas Leasing Program. Managed state's geophysical seismic exploration permit program, including data acquisition. Supported governor's and DNR commissioner's work with IO&GCC. Directed staff of four.

Manage Own Business (January 1979 to January 1981)
Fairbanks, Alaska

Building, specializing in natural log construction. Provided expertise in Arctic construction, evaluated soils for foundation design, prepared estimates, assisted clients in obtaining financing. Constructed unit, including all electrical, plumbing, heating, and finish work. Concurrently work on Masters degree at University of Fairbanks.

Geologist (October 1975 to January 1979)
R&M Consultants, Inc., Box 2630, Fairbanks, Alaska

Drill rig geologist primarily devoted to soils and permafrost investigations, material site evaluation, and geotechnical studies. Responsible for geologic logging of drill boring and collecting of core samples. Worked on numerous projects throughout state, including Trans–Alaska Pipeline. Promoted to head of R&M field operations on subsurface investigation on Northwest Gas Line right–of–way. Additional experience in hard rock geology, mineral prospecting and aerial reconnaissance.

Geologist (September 1975 to October 1975)
U.S. Forest Service, Fort Missoula, Missoula, Montana

Researched geology and mining history of forest service lands to determine mineral potential.

EDUCATION: University of Alaska, Fairbanks
Master of Science in Engineering/Science Management – 1985

Montana Sate University, Bozeman
Bachelor of Science in Geology – 1974

TECHNICAL: Society of Petroleum Engineers – Production Analysis
Oxford University, College of Petroleum Studies – Crude Oil Supply, Transportation, Trading, and Refining
American Association of Petroleum Geologist – Petroleum Exploration
Schlumberger – Production Well Log Analysis
University of Alaska – Well Log Analysis
IED – Seismic Exploration
EROS – Remote Sensing

OTHER: Mediation Institute – Dispute Resolution
Batten Seminar – Negotiation

REFERENCES: Available on request

approved

October, 1988

RESUME

GLENN W. FREDERICKS

1400 Virginia Court
Anchorage, AK 99510

PERSONAL DATA: Age: 52
Married: Jan Fredericks
Five children

EDUCATION: Palmer High School, 1954

EXPERIENCE:

June, 1973 to September, 1988: THE KUSKOKWIM CORPORATION

President/Chairman of the Board
Responsible for supervising and directing management of ANSCA Village Corporation with assets of $10 million.

June, 1973 to March, 1981: BAROMETER MOUNTAIN BUILDERS

Owner, General construction company

January, 1973 to June, 1975: CALISTA CORPORATION

Area Manager

Responsible for coordination and communication of all phases of Alaska Native Claims Settlement Act between central office in Anchorage and eleven villages in the middle Kuskokwim.

applicant

RESUME

Paul E. Johnson
P.O. Box 22
Elfin Cove, AK 99825
(907) 239-2211

Employment Experience

1984 to Present	Middle Fork Mining Co.; Treaurer; Elfin Cove; Placer mining company.
1975 to Present	CHICHAGOF CHARTERS; OWNER; ELFIN COVE GUIDING AND CHARTERING.
1975 to Present	Elfin Wet Goods; Owner; Elfin Cove Package liquor store.
1975 to Present	Elfin General Supply; Owner; Elfin Cove Grub and gear store.
1974 to Present	Elf Inn; Owner; Elfin Cove Country Inn with rooms and dining.
1973 to Present	J. & M. Fish Co.; Owner; Elfin Cove Fish buying company.
1970 to 1972	F.V. Nova; deck hand; Elfin Cove Crab and salmon fisheries.
1965 to 1970	Juneau Cold Storage; laborer; Juneau Fish processing plant.

Community Service

1986 to Present	Fish and Game Southeast Regional Council Member
1986 to Present	Community of Elfin Cove Non-profit Corporation; Vice-chairman
1985 to Present	Elfin Cove Fish and Game Advisory Council; Chairman
1985 to Present	Elfin Cove Utility Commission; Chairman

Resume
Paul E. Johnson
May 11, 1988

1980 to 1985	Elfin Cove Fish and Game Advisory Council Member
1980 to 1984	Community of Elfin Cove Non-profit Corporation; Director

Licenses/Certifications

1980	REGISTERED GUIDE; STATE OF ALASKA
1980	Passenger Carrying Vessel Certification, U.S. Coast Guard
1977	Scuba Diving Certification; P.A.D.I.
1976	CLASS A GUIDE; STATE OF ALASKA
1975	ASSISTANT GUIDE; STATE OF ALAKSA
1970	Private Pilot; F.A.A.

Education

1970 to 1973	University of Alaska, Fairbanks; Resources
1970	Graduated Juneau-Douglas High School

References

Available upon request.

HOUSE RESOURCES COMMITTEE

DATE: Mon. Feb. 22, 1993

PLACE: Capitol, Room 124

SUBJECT OF MEETING:
Confirmation Hearings
Paul Johnson - Big Game Board
David Johnston - Oil & Gas Conservation Comm.
Glenn Fredericks - Big Game Board

NAME	REPRESENTING	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?		WHAT SUBJECT/ WHICH BILL?
Paul Johnson	Self	P.O. Box 22 Elfin Cove AK	99825	239-2211	Same	Y	N	Confirmation
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	

Confirmation

Harry Noah

1-24-94

HOUSE RESOURCES COMMITTEE
COMMITTEE REPORT

January 24, , 1994

REGARDING THE CONFIRMATION OF HARRY NOAH
AS COMMISSIONER OF THE DEPARTMENT OF NATURAL RESOURCES

The House Resources Committee has considered the confirmation of the appointment of Harry Noah as commissioner of the Alaska Department of Natural Resources. The recommendations of the members of the committee are as follows:

Committee Member	Recommendation
Cal Blunde	Confirm
Glen Kelly	Confirm
Joe Davis	No Rec
Dave Finkelstein	No Rec
Tom Brice	D. P. Confirm
John Grussendorf	D. P. Confirm
Bill Hudson	Do Confirm.
W. K. Williams	Do PASS

Signed,

W. K. Williams

Rep. Bill Williams, Chairman

— COMMISSIONER - DEPARTMENT OF NATURAL RESOURCES

RESUME

HARRY A. NOAH

1013 East Dimond Boulevard, #352
Anchorage, Alaska 99515

Employment Experience

February 1981 to Present — NOAH GROUP, Anchorage, Alaska
Principal

Since 1981, Mr. Noah has worked in a number of long-term management contract positions for private industry. Major activities have included the management of environmental permit processes (both project start-up and closure) for large and controversial resource development projects throughout the western United States and Alaska. These projects have included new mines, LNG facilities, seaport and hydroelectric projects. Specific projects include the Trans-Alaska Natural Gas pipeline project, Ft. Knox, Red Dog and Greens Creek mines.

April 1984 to May 1986 — ENERGY STREAM, INC., Anchorage, Alaska
Managing Partner

ESI was established to develop small hydroelectric projects in Alaska. The company analyzed a range of potential sites in the state and determined the 13 most viable locations. Two run of river projects were acquired by ESI at Pyramid and Power creeks. Mr. Noah was responsible for all site acquisition, permitting and power sales agreement negotiations. The steep decline in oil prices in 1986 ultimately made the projects financially unattractive.

December 1978 to January 1981 — OTT WATER ENGINEERS, Redding, California/Anchorage, Alaska
Senior Environmental Planner

Responsibilities included project management of the firm's major environmental projects. Projects included the Grey Eagle Mine, Fourth of July Creek Port project, and the Mt. Shasta Ski Area project.

January 1977 to November 1978 — TERRA SCAN, Eureka and Redding, California
Office Manager/Senior Planner

Responsibilities have included the management of the Terra Scan office in Redding, California, supervising a staff of five professional and two support personnel. Primary functions involved business development and project management. Major projects included the Independence Lake Ski Area project and development of the Sierra Brooks Subdivision EIR.

October 1975 to
January 1977

COOS-CURRY COUNCIL OF GOVERNMENT, North Bend, Oregon
Planner II (Land Use)

Assumed the responsibilities of Planner in charge of the development of comprehensive land use plans for the cities of North Bend, Myrtle Point, and Powers, Oregon. Each process included extensive public involvement, development of planning policies and strategies, and the analysis of zoning ordinances to determine compliance with the comprehensive plan as part of the Oregon Coastal Zone Management Program.

Educational Background

B.S. Natural Resources Management
California State University, Humbolt
1975

Personal Data

Birthdate:	11/18/50
Marital Stanis:	Married, no children
Telephone:	(907) 346-3543 (home)
	(907) 265-3100 (office)

Explanation of Individual Project Responsibilities

Position:	Manager Environmental Affairs
Project:	Trans-Alaska Gas System
Client:	Yukon Pacific Corporation
Location:	Anchorage, Alaska

2/86 to Present

Since 1986, Mr. Noah has acted as the in-house manager of the permit acquisition program for the Trans-Alaska Gas Pipeline Project (TAGS). The position has been maintained on a long-term contract basis. The project will entail the development of a 797 mile long chilled natural gas pipeline from Prudhoe Bay to Valdez, Alaska. At Valdez, a liquified natural gas (LNG) facility would be constructed to reduce the gas to liquid form to allow the cost effective shipping of natural gas to Asian markets. Phase I of this project entailed completion of the project EIS and acquisition of federal and state pipeline rights-of-way. In addition, Phase I included the acquisition of a jurisdictional determination from the Federal Energy Regulatory Commission (FERC) and negotiations with the Department of Energy (DOE) on the acquisition of an export license for the natural gas. Mr. Noah was responsible for all aspects of the effort to obtain the rights-of-way and the EIS. Mr. Noah is currently finalizing the FERC Section 3 approval process for the Anderson Bay LNG facility.

Position:	Environmental Coordinator
Project:	Red Dog Mine
Client:	Cominco, Anchorage, Alaska
Location:	Noatak District, Alaska

9/81 to 12/85

The Red Dog project entailed the development of a major new lead/zinc mine in northwestern Alaska. The project involved the development of a new mine, mill complex, tailings dam, housing support facilities, and access road. The project also required the development of 25 miles of road within Cape Krusenstern National Monument. In September of 1985, congressional approval was granted to construct the road. Mr. Noah's duties on this project included responsibility for all environmental permitting activities related to the environmental baseline program, EIS development, budget control, and representation of the project before government agencies and special interest groups. In addition, Mr. Noah was responsible for preparation of all documentation for the Title XI process of ANILCA and representation of Cominco in Washington, D.C. in the lobbying effort to obtain congressional approval of the road route through the national monument. Major permit approvals were granted to allow the project to proceed and the mine has been in operation for a number of years.

Explanation of Individual Project Responsibilities - Continued

Position:	Environmental Coordinator
Project:	Greens Creek Mine
Client:	Noranda Mining, Denver, Colorado
Location:	Admiralty Island, Alaska (Juneau, Alaska)

12/79 to 9/81

The Greens Creek project involved the development of a 1,200 ton per day silver/zinc mine within the Admiralty Island National Monument located in southeastern Alaska. This project represents the first new mine to gain permit approval within a national monument since the national environmental laws were passed in 1969. Major regulator approvals have been granted to allow construction of this project. Mr. Noah's duties included direct responsibility for all permitting activities to the point of issuance of major permits, EIS development, involvement with project planning, and representation of the project before government agencies and special interest groups.

Major Consulting Projects

Project:	Ft. Knox Gold Mine
Client:	Amax Gold
Location:	Fairbanks, Alaska

Mr. Noah has been responsible for development of the project permitting strategies, negotiations with individual agencies in regard to permit stipulations and the management of environmental consulting firms which are providing the specific data needed to permit the project.

Project:	Fourth of July Creek Port Complex
Client:	City of Seward, Alaska
Location:	Seward, Alaska

The Fourth of July Creek project entailed the development of a major industrial port complex. The complex will ultimately involve over 250 acres and include a new shipping dock, and ship handling facilities. Mr. Noah was in charge of the OTT engineer project team with responsibility for permit acquisition and preparation of the EIS. The project was permitted within eight months from the initiation of the team's work. The project is complete.

Project:	Grey Eagle Mine
Client:	Noranda Mining, Denver, Colorado
Location:	Happy Camp, California

The Grey Eagle Mine project involved the development of a new open pit mine within a designated wild and scenic river area of northern California. The project entailed the construction of a 450-foot high tailing dam, access roads, open pit, and concentrator. Mr. Noah's duties were project management of the OTT engineer team which prepared site plans, the EIR, and all permit-related documents. The project represented one of the first joint U.S. Forest Service and county permitting processes in California.

Major Consulting Projects - Continued

Project: First Federal Savings & Loan - Disposal of Excess Properties
Client: Real Estate Division, First Federal Savings & Loan
Location: Redding, California

Mr. Noah's involvement with First Federal was with respect to planning and aiding in disposal of properties owned by the savings & loan. Primary activities included site planning for this firm's lands, which were scheduled for future subdivision and sale. This contract was for a term of one year, at the end of which the majority of properties were available for sale.

Project: Chichagof Mine
Client: John Hite, Exvenco
Location: Sitka, Alaska

The Chichagof Mine will entail the development of a high-grade gold mine on patented claims surrounded by the Chichagof Wilderness Area. Duties have included representation of the client before resource agencies and preparation of environmental documentation. Consulting activities are currently ongoing.

Project: Black Bird Mine
Client: Noranda Mining, Denver, Colorado
Location: Salmon, Idaho

The Black Bird project entailed the development of an underground cobalt mine adjacent to the River of No Return Wilderness Area. Mr. Noah's duties included initiation of the permit process for Noranda Mining, and specifically recommending strategies for permit acquisition and advising the project staff on EIS development.

Project: Mt. Shasta Ski Area
Client: Ski Shasta Corporation
Location: Mt. Shasta City, California.

This project called for the expansion of an existing ski area on Mt. Shasta. Mr. Noah represented Ski Shasta Corporation before the U.S. Forest Service and special interest groups.

Project: Independence Lake Ski Area
Client: Walt Disney Corporation
Location: Sierra County, California

The Walt Disney Corporation proposed the development of a $120 million ski area north of Lake Tahoe, California for which preparation Mr. Noah was in charge of the Terra Scan team retained to develop a joint EIS/EIR for the project. This project did not proceed past the initial planning stages.

Major Consulting Projects - Continued

Project: Sierra Brooks Subdivision
Client: Sierra County
Location: North of Lake Tahoe, California

Mr. Noah was in charge of the Terra Scan team that prepared an EIR on a 614-unit, second home subdivision proposed by Occidental Petroleum Company for an area north of Lake Tahoe, California.

Project: AJ Gold Mine
Client: Echo Bay Mines
Location: Juneau, Alaska

Mr. Noah was responsible for preparing the initial data submittals, environmental consultant management and negotiation with individual resource agencies on permit stipulations for this project.

Bio for Harry A. Noah
Commissioner, Department of Natural Resources

Harry A. Noah
Commissioner, Department of Natural Resources
400 Willoughby Avenue, Fifth Floor
Juneau, Alaska 99801
465-2400/465-3886 Fax
3601 C Street, Suite 1210
Anchorage, Alaska 99503-5921
762-2483/562-4781 Fax

Born November 18, 1950, in Pittsburgh, Pennsylvania. Resident of Alaska since 1980. Attended California State University, Humboldt, B.S. Natural Resources Management. Married: wife, Claire McLaughlin.

Managed environmental programs for major resource development projects located in the western United States. Projects included: Greens Creek Mine, Red Dog Mine, Trans-Alaska Natural Gas System.

Appointed July 1, 1993.

Confirmation

Glen Olds

2-8-93

Alaska State Legislature

Official Business

HOUSE RESOURCES COMMITTEE

State Capitol
Juneau, Alaska 99801-1182

HOUSE RESOURCES COMMITTEE
COMMITTEE REPORT

February 8, 1993

REGARDING THE CONFIRMATION OF GLEN A. OLDS
AS COMMISSIONER OF THE ALASKA DEPARTMENT OF NATURAL RESOURCES

The House Resources Committee has considered the confirmation of Mr. Glen A. Olds for the position of Commissioner of the Alaska Department of Natural Resources. The recommendations of the members of the committee are as follows:

Committee Member	Recommendation
Bill Hudson	Do Recommend
Con Bunde	Do Recommend
Jack W. Davies	Do Recommend
Jeannette James	Do recommend
[illegible]	Do recommend
W.K. Williams	Do Recommend
Eldon Mulder	Do Recommend
[illegible]	Do Recommend

Signed, W.K. Williams

Rep. Bill Williams, Chairman

Dr. Glenn A. Olds
Introductory Material

As Commissioner of the Alaska Department of Natural Resources (DNR), Dr. Olds oversees and facilitates the wise use, development and conservation of state-owned land, larger than California, oil, gas, timber, minerals, energy, water, agriculture, and recreational resources. As the steward of public land, the Commissioner strives to maximize current and future public benefit from the State's renewable and non-renewable resources. He most recently served as Commissioner of Commerce, Economic Development, and International Trade.

As President and Chief Executive Officer of the Better World Society, before returning to Alaska, Dr. Olds recently organized global strategy for bringing urgent messages of change or perish to the people and the planet. The Society's focus on reducing the threat of nuclear war and the arms race, care and tending of our environment, stabilizing our explosive population rate, finding new and wiser uses for our resources, and serving and empowering persons in life-threatening need, illustrates the agenda of his own life.

Dr. Olds illustrates in his personal and professional life that integration of diversity that is the clue to the global society now emerging. Born of a Catholic father, Mormon mother, Quaker upbringing and Methodist ministry, he worked his way through high school, college, and three graduate schools with honors and distinctions as a logger, ranch hand, park and forest ranger, professional boxer, dance band leader, dishwasher and country preacher. His work and travel have linked him with educational, governmental, and service functions, around the world.

He has been a pioneering leader as Chairman of the International Consortium on Energy Research, the International Design Science Institute, and initiator of the United Nations University, the International Volunteer Service Corps, and the Institute of Noetic Sciences. Dr. Olds has been guest editor of the Saturday Review, author or co-author of five books, over 75 articles, and has been a principal speaker at major national and international conferences and congresses.

He has served on the faculty of an ivy league college, a small Midwestern college, major Midwestern and Rocky Mountain universities, private and public; as Executive Dean of the largest university system in the world (SUNY) and president of one of its smallest colleges. He has been president of a New England college (Springfield) and a major Midwest State university (Kent State), and has built a new university on America's Last Frontier, Alaska. He has served four U.S. Presidents, Eisenhower, Kennedy, Johnson, and Nixon. He was an early consultant for the Peace Corps, principal architect of VISTA in the war on poverty, and U.S. Ambassador to the United Nations Economic and Social Council. He has served as consultant to many nations including: Liberia, Nigeria, Mexico, Singapore, and Hong Kong.

Dr. Olds has kept close to the earth on his summer retreats to his Vermont rock farm; close to students as continuing teacher of philosophy; close to the needy of the world in his national and international services roles; close to his wife, daughter and son -- all "doctored" (M.D. and Ph.D.); and close to tomorrow as one of the authentic futurists of today. Equally resilient in fair weather or foul, his colleagues and trustees at Kent State described his constructive role through the healing of his years there in the phrase which describes his life as well, "He who is born in the fire, will not fade in the sun." Or, as a friend recently wrote, "He does not follow where the path may lead, instead he goes where there is no path, and leaves a trail."

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

PERSONAL DATA

Address:	Alaska Department of Natural Resources 400 Willoughby Ave, 5th floor Juneau, Alaska 99801
Birth:	February 28, 1921, Sherwood, Oregon
Family:	Wife - Dr. Eva B. Spelts Olds Children - Dr. Linda E. Olds and Dr. G. Richard Olds

EDUCATION

A.B.	(Magna Cum Laude) Willamette University, 1942
B.D.	(With Highest Distinction) Garrett Theological Seminary, 1944
M.A.	In Philosophy (With Honors) Northwestern University, 1945
Ph.D.	In Philosophy, Yale University, 1948

PROFESSIONAL

June 1992	Commissioner of the Alaska Department of Natural Resources, responsible for overseeing and facilitating the wise use, development and conservation of state-owned land, oil, gas, timber, minerals, energy, water, agriculture, and recreational resources. As the steward of public land and resources, the Commissioner strives to maximize current and future public benefit from the State's renewable and non-renewable resources.
January 1992	Adjunct Professor of Philoshophy, University of Alaska Southeast, Juneau, Alaska
January 1991 - June 1992	Appointed Commissioner of the Department of Commerce and Economic Development by Governor Walter J. Hickel. This department is responsible for strengthening and diversifying Alaska's economic base in a way that will offer long-term net benefits to all Alaskans. The department administers consumer protection programs and assists in a variety of semiautonomous organizations involved in both regulation and development.
October 1989	President and Chief Executive Officer, Better World Society Responsible for comprehensive leadership and management of the affairs of the Society, under policy direction of its international board.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

October 1987 - 1989 — President and Chief Executive Officer, The John E. Fetzer Foundation

Responsible for comprehensive leadership and management of Michigan's fifth largest foundation with assets over $200 million. The Foundation encourages and supports research, education, and action concerned to improve human and cosmic well being through enhancing the integral and optimal relationship of the physical, emotional, intellectual, and spiritual dimensions of experience.

From the Foundation's unique headquarters in Kalamazoo, Michigan, it supports programs of research at major universities and institutes, clinical and service programs throughout the world. It also supports discovery and encouragement of solitary thinkers, inventors/discoverers wherever found bent on helping heal the whole person and the whole world. Special attention is given to encouraging the wedding of the spiritual and scientific strategies for understanding and improving our human condition.

January 1988 — Adjunct Professor of Philosophy, Western Michigan University, Kalamazoo, Michigan

June 1989 — Adjunct Professor of Medical Sciences, The College of Human Medicine, Michigan State University, East Lansing, Michigan

December 1987 — President and Professor of Philosophy Emeritus, Alaska Pacific University

May 1986 - November 1986 — Democratic candidate, United States Senate from Alaska

July 1977 - January 1988 — President and Professor of Philosophy, Alaska Pacific University

Responsible for reopening and redirecting the only private university in Alaska, linking it to the Pacific Rim, wedding American and Asian cultures, liberal arts and the profession of a new country and the emerging 21st century; established undergraduate and graduate programs with institutional relationships with Japan, Korea, People's Republic of China, Southern Methodist University, and Boston University.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

September 1971 - July 1977

President and Professor of Philosophy, Kent State University

Responsible for one of the largest state universities in Ohio, with 20,000 students on an 800-acre campus with a physical plant worth $200 million. Also responsible for seven additional regional campuses with and enrollment of 8,000 students. All graduate and undergraduate programs have institutional accreditation; 13 degrees and the university offers continuing education programs and international studies programs. Developed a new kind of medical school; honors and experimental college; Geneva campus on U.N. studies, and major center for minority leadership, and political campaign leadership.

March 1969 - March 1971

U.S. Ambassador - Representative, United Nations Economic and Social Council

Responsible for United State representation on the United Nations Economic and Social Council, its major agency for considering and coordinating all matters concerning economic and social affairs which includes above 85 percent of the work in the U.N. This includes the functional commissions of human rights, population, social development, the status of women, statistics, and drugs and narcotics; the regional economic commission for Africa, Asia, and the Far East, Europe, and Latin America; coordination of the 13 specialized agencies, including UNESCO, UNICEF, World Bank, FAO, ILO, WHO, and the rang of United Nations Development Agencies in the economic and social field.

May 1968 - February 1969

Special Assistant for Policy and Manpower Development to President Richard M. Nixon

Responsible through campaign, election and transition for cultivation, analysis, and recommendation of major policy personnel responsibilities in foreign affairs; domestic affairs; health, education, welfare; economic and fiscal affairs; justice, law and order; and administration.

1965 - 1968

University Dean for International Studies and World Affairs, State University of New York System

First university-wide dean for initiating, coordinating, and administrating comprehensive international studies, programs, and

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

services on 62 campuses, involving 16,000 faculty, 142,000 students, and an annual budget of $340 million. Initiated 88 overseas programs on every major continent, over 1,900 courses, and coordinated programs in overseas technical assistance, library and learning resource development, foreign faculty and student exchange, and international conferences and seminars.

1958 - 1965 President, Springfield College, Springfield, Massachusetts

Headed unique educational institution for international youth and community service leaders (90% of graduates go into these fields); pioneered in international youth leadership programs in Africa, Asia, and Latin America; developed first pre-release guidance center for federal youth offenders; community tensions center, Urban Affairs Center; new curriculum in the liberal arts, strengthened doctoral program in health and community recreation; doubled faculty salaries, endowment, and built ten new buildings.

1954 - 1958 Director, Cornell University United Religious Work, Cornell University, Ithaca, New York

The first university appointee to one of the oldest and most unique programs of interreligious cooperation, involving 17 full-time chaplains of all faiths. Comprehensive services to all students irrespective of denomination, responsible for developing curricula and course options for the major colleges in the university, comprehensive counseling, campus and international summer services in Latin america, the Middle East, Africa, and Europe.

1951 - 1954 University Chaplain and Professor, University of Denver, Denver, Colorado

Comprehensive coordination of all University religious activities, courses in ethics and philosophy of religion, university sponsored television program on "Ideas and Men," administrative responsibility for liaison with all religious publics.

1948 - 1951 Associate Professor of Philosophy and Ethics, Garrett Theological Seminary; Visiting Professor of Philosophy, Northwestern University.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

Responsible for developing a new curriculum in philosophy aimed at broadening religious leadership training to include philosophy of science, culture, political and critical contemporary issues in ethics.

1948 Assistant Professor of Philosophy, Depauw University, Greencastle, Indiana

Courses in Logic, Philosophy of Science, Ethics, History and Religion.

1947 Assistant in Instruction, Yale University, New Haven, Connecticut
Courses in Introduction to Philosophy.

PROFESSIONAL
(part-time)

U.S. Delegate, International Conference on Nuclear War: Its Consequences and Prevention, Bellagio, Italy, 1984.
Consultant, Oregon State International Trade Fair and Development Center, 1983.
U.S. Representative, Kyoto Conference on U.S. - Japan Relations, Kyoto, Japan, 1969.
U.S. Representative, Conference on the Future of the U.N., Dubrovnik, Yugoslavia, 1968.
U.S. representative, conference on Latin America in the last quarter of the twentieth century, Mexico City, Mexico, 1968.
Consultant, Universidad de Oriente, Venezuela, 1968.
U.S. Representative, Convening Committee, Universities Convenor and host, North American Conference on Universities Role in the Quest for peace, International Center, L.I., 1967.
Adviser, National Association of International Relations Clubs, 1967-68
Leader, American Seminar to the U.S.S.R., 1967.
Chairman, Seminar, Educational and Cultural Exchange, White House Conference on International Education, 1965.
Executive Committee, Alliance for Progress, Massachusetts-Columbia, 1964-65
Special Assistant to Sargent Schriver in War on Poverty (architect of VISTA), 1964.
Consultant, Ministry of Education, Nigeria, 1962.
Consultant, Government of Liberia, 1962.
Consultant, Peace Corps, 1961.
Consultant, Disarmament and Arms Control Commission.
Consultant, President's Council on Juvenile Delinquency, 1961-62.
Consultant, President's Council on Youth and Physical Fitness, 1961-63.
Consultant, President Eisenhower, Stockholm Conference on Education, 1960.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

HONORS

William G. Anderson Award by the American Alliance for Health, Physical Education, Recreation and Dance, 1986.
Outstanding Alumnus, Northwestern University, 1981.
Honorary Doctor of Humane Letters, Chung Ang University, Seoul, Korea, 1978.
Honorary Doctor of Science, Central Michigan University, December, 1976.
Honorary Doctor of Laws. St. Lawrence University, Canton, New York, 1975.
Area Winner of the 4-H Alumni Award, 1974.
Honorary Doctor of Literature, University of Redlands, Redlands, California, June, 1974.
Honorary Doctor of Humane Letters, Muhlenberg College, Pennsylvania, 1972.
Honorary Doctor of Humane Letters, Lakeland college, Wisconsin, 1971.
Honorary Doctor of Law, University of Akron, Ohio, 1971.
Honorary Doctor of Humane Letters, Inter-American University, Puerto rico, 1968.
Honorary Academician, China Academy, Taiwan, 1967.
Academico Honoris Causa, Mexican Academy of International Law, 1967.
Outstanding Citizen Award, City of Springfield, Massachusetts, 1965.
Honorary Doctor of Divinity, Willamette University, Salem, Oregon, 1955.
Outstanding Teacher Award, University of Denver, Denver, Colorado, 1953.
Robinson Fellowship, Yale University, 1945-46.
Swift Traveling Fellowship, Northwestern University, 1944-45.
Tau Kappa Alpha (National Forensic Honorary), 1942.
Omicron Delta Sigma (National Scholastic Honorary),1942.
Blue Key (National Service Honorary), 1941.

PUBLICATIONS

Author or co-author of five books, over 75 articles, guest editor, Saturday Review, frequent contributor to major professional and international journals.

ASSOCIATIONS

Advisor, St. George Bicentennial Committee, 1985-86.
Honorary Member, Rotary International, Anchorage Chapter.
Member, Alaska State Chamber of Commerce.
Member, Alaska Geographic Society.
Member, Executive Committee of the American Council for the United Nations

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

University.
Member, Washington Athletic Club (Seattle, WA).
Member, National Association of Independent Colleges and Universities and National Institute of Independent Colleges and Universities.
Member, Tower Club (Anchorage, AK).
Member, The Yale Club (New York, NY).
Member, Alaska Resource Council, 1985.
Member, National Advisory Committee, National Peace Academy, 1981.
Member, International Advisory Council of Interfutures, 1981.
Member, National Advisory Committee, Future's Studies Academy, University of Massachusetts, 1980.
Member, National Advisory Committee for International Graduate Christian University.
Member, Commonwealth North, 1979-
Vice President, 1979-1982
Energy Committee.
Member, American Security Council Foundation.
Member, Economic Education Committee for Alaska.
Member, Anchorage Chamber of Commerce.
Education Committee.
Member, Alaska Heritage Review Board.
Member Board of Directors, YMCA, Anchorage, AK.
Member, American Council on Education.
Membe , Association of Governing Boards of Universities and Colleges.
Member, Council of Independent Colleges.
Member, Cosmos Club (Washington, D.C.).
Trustee, Interfaith Campus Ministry, 1973-
Trustee, N.C. Ohio College of Medicine, 1974-
Chairman, Consortium for International Energy Research.)
Ex-Officio Trustee, Akron Art Institute, 1974-
Founding Member, Institute of Noetic Sciences, 1974-
Member, American Philosophical Association.
Member Coalition for Peace Through Strength.
Member, International Association of University Presidents.
Member, Center for Strategic and International Studies.
Member, International Cultural Foundation.
Member, International Symposium on Circumpolar Health.
Member, National Association of Schools and Colleges of the United Methodist Church.
Member, Northwest Association of Schools and Colleges.
Member, Oceanic Educational foundation.
Member, U.S.-Chinese Institute.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

Advisory council Member, Global Water, Washington, D.C.
Commission on Honest Elections, Alaska, 1978.
Akron Regional Development Board Member, 1975.
The National Committee to Develop an American University Consortium on Energy and the Natural Resources. A Regional Center of the United Nations University, 1974.
Charter Member, Oceanic Society, San Francisco, California, 1974.
Chairman, Governor's Commission on the U.N. for Ohio; 1973-74.
Sponsor for the Near East Foundation Africa Fund, 1973-.
A Founding Member, United States Committee for United Nations University.
Interfaith Campus Ministry, Board of Trustees, 1973.
Board of Governors, Blossom Festival Society (Ohio), 1972-.
Member at Large, Boy Scouts of America, 1972-.
President, Board of Directors, Design Science Institute, 1972-.
Governor's Advisory Council on Malabar (Ohio), 1972-.
Board of Directors, Edgar Mitchell Associates, 1972-.
Committee on Educational Opportunities for Minority Groups of the National Association of State Universities and Land-Grant Colleges, 1971-.
Board of Directors, Council for the Study of Mankind, 1971.
Trustee, Dag Hammarskjold College, 1968-.
Vice Chairman, Education and World Affairs, Council on University International Programs, 1968.
Vice President, The Metropolitan Area council for International Recreation, Culture, and Life-long Education (NYC), 1968.
Advisory Board, International Training, American Society of Public Administration, 1967-68.
Executive Committee, International Education, National Association of State University and Land-Grand Colleges, 1966-68.
Advisory Board, U.S.-France Institute of American Studies, Paris, France, 1966-68.
Executive Committee, National Survey of Community Health Services, 1964-65.
Trustee, Albert Schweitzer Foundation, 1962-65.
National Citizen's Advisory Committee on Community Campaigns and Welfare, 1962.
Program Committee, national Council of YMCA, 1959-65.
Trustee, World Literacy Foundation, 1960-62.
Advisory Council, National Council of Boy Scouts of Americas, 1960.
Commission on the Arts, American Association of Colleges, 1960-62.
Council Member, Center for Integrative Education, 1958-.
Commission on Student Personnel - American Council on Education, 1956-58.
President, Alpha Psi Zeta Foundation, 1954.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

REFERENCES

Who's Who in America, 47th ed. (1992-93). Chicago: Marquis Who's Who,Inc., 1984.
Directory of American Scholars, latest 6th ed. Tempe, Arizona: The Jaques Cattell Press.
Community Leaders and Noteworthy Americans, Raleigh, North Carolina: American Biographical Institute.
Leaders in Education, 5th ed. Tempe, Arizona: The Jaques Cattell Press.
Who's Who in the Midwest, 13th ed. Chicago: Marquis Who's Who, Inc.
Who's Who in American Politics, 4th ed. (1973-74). Tempe, Arizona.
The World Book Encyclopedia, (Chicago: Field Enterprises Education Corporation).
National Social directory. New York, New York.
Directory of International Biography. 1973-74 ed. London: 1973
International Who's Who in Community Service, London.
Who's Who in Government, Chicago: Marquis Who's Who, Inc.
Who's Who Among Authors and Journalists. New York.

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

MANUSCRIPTS AWAITING FINAL PREPARATION FOR PUBLISHING
Dr. Glenn A. Olds

1.	Philosophy of Religion	Comprehensive, constitutive text
2.	The Moral Life	Comprehensive, constitutive text
3.	The Nature of Moral Insight	Original philosophical essay
4.	Toward a Natural Theology	Bridging science, philosophy and religion
5.	The Philosophy of the Science and Religion	Toward a now synthesis
6.	The philosophy of the Revolutionary Religion of Jesus	A fresh statement of the message and mission of Jesus
7.	A Philosophy of Education	On the nature and mission of a Uni-versity
8.	Foundations of Twentieth Century Thought	Philosophy of contemporary American cultures
9.	Introduction to Philosophy	Constitutive text around five great questions of life
10.	Human Nature and its Transformation	Critique of contemporary philosophies of personality and pedagogy
11.	Essays in Education	Comprehensive contemporary issues and themes - text
12.	Apologia Pro Vita	Philosophy of the physical wholeness, and health
13.	The Search for Certainty	Essays on methods and models of knowing
14.	Tomorrow Under Construction	Futuristic essay on cultural trends and planetary perspectives
15.	Philosophy of Administration in Adversity	Philosophical perspective and practice

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

		of Universities in crisis
16.	Kent State in Retrospect: A Culture in Revolution	What can be learned from Kent State
17.	Credo for Democracy	A fresh philosophical statement of the truths we hold as "self evident"
18.	Frontiers of the Mind	Emerging fields of consciousness study and research
19.	Viva La Difference	A philosophy of complementary polarity of masculine-feminine
20.	A New Copernican Revolution	A philosophy and practice of the United Nations in a new world aborning
21.	Two Years Before the Mist	Biography of a layman in politics - My my experience of service under for U.S. Presidents
22.	Alaska's Agenda for America	Alaska's pivotal importance to the world

VITA

GLENN A. OLDS
Commissioner
Department of Natural Resources
(907)465-2400

COURSES TAUGHT BY GLENN A. OLDS AT YALE, DE PAUW, GARRETT, NORTHWESTERN, UNIVERSITY OF DENVER, CORNELL, SPRINGFIELD, KENT STATE, ALASKA PACIFIC UNIVERSITY, AMERICAN UNIVERSITY AND UNIVERSITY OF ALASKA

1. Introduction to Philosophy
2. Problems of Philosophy
3. History of Philosophy (Ancient, Modern, Contemporary)
4. Philosophy of East and West
5. Logic
6. Ethics
7. The Moral Life
8. Christian Ethics
9. Ethical Systems
10. Evaluation of Morals
11. Moral Values in a Changing World
12. Value Theory
13. Philosophy of Religion
14. Philosophical Foundation of Religion
15. Modern Philosophies of Religion
16. Foundations of Twentieth Century Thought
17. Science, philosophy, and Culture
18. Science, Nature, and God
19. Human Nature and its Transformation
20. The Logic of Religious Discovery
21. Honors Course for Senior Engineers (Cornell) on Science and Values
22. Honors Course for Seniors in Business (University of Denver) on Philosophy and Values in Business Administration
23. Graduate Integrative Course (Northwestern and Garrett) on Science and Religion
24. Seminars on:
    Plato
    Locke, Berkley, and Hume
    Kant
    Schopenhauer
    Whitehead
    Temple
    Northrop
    Cassirer
    Sri Aurobindo

Confirmation

Bruce

Twomley

2-19-93

Alaska State Legislature

Official Business

HOUSE RESOURCES COMMITTEE

State Capitol
Juneau, Alaska 99801-1182

HOUSE RESOURCES COMMITTEE
COMMITTEE REPORT

February 19, 1993

REGARDING THE CONFIRMATION OF BRUCE TWOMLEY
AS COMMISSIONER OF THE COMMERCIAL FISHERIES ENTRY COMMISSION

The House Resources Committee has considered the confirmation of Mr. Bruce Twomley for the position of Commissioner of the Alaska Commercial Fisheries Entry Commission. The recommendations of the members of the committee are as follows:

Committee Member	Recommendation
Bill Hudson	Do Confirm
[illegible]	Do Confirm
[illegible]	Do Confirm
Edmunds James	Do Confirm
Joe N Davis	Do Confirm
Allan Khedun	Do Confirm
Con Bunde	Do Confirm
W.K. Williams	Do Confirm

Signed, W.K. Williams

Rep. Bill Williams, Chairman

DEC

Radiation

Briefing

3-19-93

U.S. Department of Energy
Nevada Field Office
December 1992

Project Chariot
Cape Thompson, Alaska

History

Project Chariot moved off the drawing board in July 1958 when a scientific field party chose Ogotoruk Creek near Cape Thompson in northwestern Alaska as the Project site.

Chariot was part of the U.S. Atomic Energy Commission's Plowshare Program. Plowshare was initiated to study peaceful uses for nuclear explosives. For example, scientists wanted to know if nuclear explosives could be used to move huge quantities of soil and excavate a harbor. The primary purpose of Project Chariot was to investigate the technical problems and to begin development of nuclear excavation technology. Similar studies were underway in Colorado, New Mexico, and Nevada. However, no nuclear detonations were performed at the Chariot site.

Because of the harsh arctic climate, work at Ogotoruk Creek was limited to the summer months. n July 1959, scientists began geological, hydrological and environmental studies. Two exploratory holes were drilled in the valley floor bedrock to determine the depth of the permafrost. Scientists conducted environmental studies on land and sea mammals, fish, birds, vegetation, oceanography, marine biology, limnology, human geography, ecology, archeology, and climatology. The scientists started experiments to determine the natural background levels of radiation in the land and sea ecosystems. These studies continued until the camp closed for the winter.

When the camp re-opened in April 1960, the experimental studies on Project Chariot continued. Scientists drilled two more holes in the valley floor bedrock. Using refrigerated drilling fluid, cores were taken in their original frozen condition. These were preserved, and frozen-state physical properties were established. Scientists installed temperature measuring cables in each hole to collect information on the permafrost.

In November the scientists conducted a small high-xplosive cratering experiment at the Project site. A 256-pound sphere of TNT was detonated about nine feet below the surface of a rock outcropping on the valley floor. This test was done to obtain information on the size of particles resulting from the blast, how far the particles were thrown, and the dimensions of the crater produced by the explosion in the frozen bedrock. The camp was then closed for the winter.

The camp re-opened in May 1961 and the environmental and geological research continued. Scientists wanted to complete studies of the ecological features and the area's background radiation levels. Three 10-inch, 22-foot deep holes were drilled for another cratering experiment. However, these tests, scheduled for 1962, were not conducted.

In September, as the camp was being deactivated for the winter, the scientists set up radiation monitoring stations at the Project site and in nearby villages. The Soviet Union had resumed nuclear weapons testing following a three-year moratorium, and the United States had followed suit. The monitoring stations would measure the radioactive fallout that came from the renewed testing activity.

When the scientists returned in April 1962 they focused on collecting environmental samples (animals, vegetation, soils, water) to measure changes in the levels of radiation as a result of the latest series of atmospheric tests.

The U.S. Geological Survey (USGS) carried out a limited five-day radioactive tracer experiment on the soils at the Chariot site. Since the planned Chariot test would release some radioactive materials into the atmosphere, the researchers needed to know what effects this radiation might have on the local environment, and how fast it would migrate through the soils and water.

Small quantities of radioactive material and about 15 pounds of soil containing radioactive fallout from the Sedan test (a Plowshare experiment in Nevada) were used as the tracers. Measurements were taken on 10 plots adjacent to the headwater forks of Snowbank Creek, about 1.6 miles north-northwest from the Chariot site. (Test plots were small, from 2' x 2' to 5' x 7'.) The following types and quantities of radioisotopes were used: six millicuries

of Cesium-137, five millicuries of Iodine-131, five millicuries of Strontium-85, and ten millicuries of Project Sedan soil.

Following completion of the tracer study, the soil was removed and transported to a disposal area in Ogotoruk Creek Valley in four to six half-filled 55-gallon drums. At the disposal area, the soil was poured from the drums and mixed with local soils. This mixing process generated about 15,000 pounds of soil, six inches thick and six meters by six meters. The soil was then covered with four feet of clean soil to form a mound that is about 40 feet by 40 feet.

In November 1962 the Atomic Energy Commission permanently closed the camp without completing the experiments. After reviewing the Project Chariot plans, progress, and objectives, the Commission canceled the program. Much of the information they had hoped to obtain from Chariot already was available from earlier tests or would be developed from other experiments.

On April 28, 1963, the site was transferred to the Naval Arctic Research Laboratory. The laboratory ceased operations at the site in 1970, and most of the site was transferred by the Bureau of Land Management to the U.S. Fish and Wildlife Service in 1980.

Current Status

The Project Chariot mound still contains Cesium-137, which has a half-life of 30 years, as well as the products from the Sedan test dirt which has a half-life of 30 years or less. Both Iodine-131 and Strontium-85, with half-lives of less than 70 days, have decayed away. The present concentration of radioactivity in the soils is estimated to be 0.080 nanocuries (0.000000080 of one millicurie) per gram with a total of less than eight millicuries for the whole mound. For comparison, one gram of potassium as it is produced in nature contains 0.8 nanocuries per gram of radioactive Potassium-40. That is ten times the level existing at the Ogotoruk Creek Valley site.

A risk assessment review by the Oak Ridge Institute for Science and Education in Tennessee found the concentration of radioactivity at the mound poses no risk to human health or the environment.

In 1992, both the State of Alaska and the U.S. Army Corps of Engineers made a survey to determine the condition of the mound and to measure any radioactive emissions. The Alaska Department of Environmental Conservation concluded the radioactive material remains intact, frozen beneath the permafrost just as it was buried 30 years ago. Testing conducted by the Army Corps of Engineers indicates there are no radiation levels above background at the surface. Sample soil cores, also taken by the Corps of Engineers, do not show any levels of radioactivity that are harmful to public health and safety or the environment.

From these investigations, both federal and state of Alaska scientists concluded that the wastes left from Project Chariot pose no hazard to human health or the environment. However, the mound does constitute a radioactive waste site which the Department of Energy must study and evaluate for removal.

During October 1992, representatives from DOE and the State of Alaska conducted public meetings at local villages to talk about Project Chariot. On October 21, representatives from DOE, and the state of Alaska as well as residents from Point Hope inspected the Chariot site and took radiation readings of the area. No readings were registered above background at the surface of the disposal mound.

Next Step

DOE has a mandate to clean up waste sites left from 40 years of Cold War activities. The Ogotoruk Creek Valley site is one of many that must be fully studied and understood. Scientists must know what radioactive elements are left in the soil as a result of Project Chariot. Once this identification process is complete, DOE plans to dig out the area and place the soils in containers. The containers will be shipped for permanent disposal to a federally-permitted DOE facility for low-level radioactive waste management. These are state-of-the-art, high-technology, secured facilities where radioactive wastes from the nation's defense activities are isolated from people and the surrounding environment.

After the waste soils are removed from the mound, DOE, and the state of Alaska, will conduct a final close out environmental survey. This is scheduled to take place in late summer 1993.

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPT. OF HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH
SECTION OF EPIDEMIOLOGY

3601 'C' STREET, SUITE 378
P.O. BOX 240249
ANCHORAGE, ALASKA 99524-0249

INFECTIOUS DISEASES
AIDS/STD
TUBERCULOSIS
IMMUNIZATION 561-4404
CHRONIC DISEASES
DIABETES
INJURY CONTROL

Health Risk Assessment of Radioisotopes at Cape Thompson, Alaska

Bruce Chandler, M.D., M.P.H.
John P. Middaugh, M.D.

November 24, 1992
Section of Epidemiology

Introduction

A number of scientific studies were conducted in the Cape Thompson, Alaska, area from 1958 to 1963 in preparation for Project Chariot--the proposed creation of a deep-water harbor by a nuclear explosion. Most of these studies were of the geology and ecology of the area. In 1962 an experiment was conducted at Cape Thompson to study how radioactive particles move if applied to the soil and water in the area. After this experiment was completed, the isotopes and all potentially contaminated soil used were moved to a disposal site, buried, and covered by clean soil. A formal report of the radioisotope experiment was published in 1966.[1]

In 1992 Dan O'Neill, a research associate at the University of Alaska Fairbanks who was studying Project Chariot, obtained a letter indicating that the amount of radioisotopes buried at the site exceeded the amount allowed in the permit issued in 1962 by the Atomic Energy Commission for on-site burial.[2] Public release of this information by Mr. O'Neill gained wide-spread attention when announced as a banner headline, "Nuclear Waste Dump Discovered," in September. A series of front-page news stories and lack of local knowledge of specific information about the Cape Thompson experiments caused much concern and anxiety. Local residents feared that the nuclear wastes in the disposal site might be the cause of cancers among residents of northwest Alaska, especially among residents of the villages nearest to the site; Point Hope, 32 miles to the northwest, and Kivalina, 41 miles to the southeast.

Since the existence of the disposal site was publicized, there has been much discussion about what should be done to remedy this situation. Initially many demanded that the material be dug up and moved to a radiation storage facility in the lower 48. On September 15, Governor Walter Hickel and Senator Frank Murkowski visited Point Hope and the abandoned site at Cape Thompson. Both promised immediate action and indicated that any residual waste would be removed and the site cleaned up by March 1993. Some feel the health risk posed by the site to be so great that removal this winter should be undertaken, even though the environmental

conditions at Cape Thompson in winter could pose a great threat to the safety of personnel working at the site and traveling to and from the site.

This paper will review the radioisotope experiment conducted at Cape Thompson, studies on cancer and radiation exposure among native villagers in the arctic, and the health risk posed by the site to local residents, especially subsistence hunters who may visit the disposal site.

Background

In August 1962 scientists with the U.S. Geological Survey, acting on behalf of the U.S. Atomic Energy Commission, conducted an experiment to evaluate the potential effects of Project Chariot on local water supplies in northwestern Alaska. The use of a nuclear explosion to blast a harbor at the site would release radioactive particles into the environment. The experiment at Cape Thompson was conducted to evaluate how radioactive particles would move when deposited onto the surface of the tundra. The study was designed to measure movement of radioactive particles into the ground and over the surface into streams and ponds. Results were intended to enable scientists to predict the effects of a nuclear detonation's radiation impact on the area.

In the experiment a total of twelve test plots were studied. Mixed fission products and measured amounts of three specific radioisotopes totalling 26 millicuries of radioactive material were diluted in a total of 43.5 pounds of sand and soil and applied to the 12 test plots. The three identified radioisotopes used in this experiment were 6 millicuries of Cesium^{137}, 5 millicuries of Iodine^{131}, and 5 millicuries of Strontium^{89}. Ten millicuries of Sedan Fallout mixed fission products also were used. Three test plots were seeded with Cesium^{137}; two plots each were seeded with Strontium^{89} and Iodine ^{131}; and 5 plots received Sedan Fallout mixed fission products.

The Sedan mixed fission products were collected by placing a tray on the ground one mile from ground zero of the Sedan nuclear detonation at the Nevada Test Site. This detonation was similar in type to that planned for the Project Chariot detonation. The Sedan nuclear detonation was one of a series of nuclear tests conducted by the U.S. Government in the 1950s and 1960s. Scientists are able with great accuracy to deduce detailed characteristics of the nuclear device being tested from analysis of fallout products. For this reason, exact details of the composition of radioisotopes collected during the Sedan test were classified. According to the Department of Energy Field Office in Las Vegas, information on the component isotopes of the Sedan fallout mixed fission products remains classified. Efforts are underway within the Department of Energy to obtain and release this information.

In ten of the 12 experimental test sites at Cape Thompson, radioisotopes mixed with soil or sand were applied to the surface of the sites. The sites were then sprayed with water to simulate natural rainfall, and the movement of the isotopes after the simulated rainfall was assessed. In one plot a percolation test was performed to measure the underground movement of radioisotopes. In one plot, 1.7 millicuries of Sedan mixed fission products were dispersed in

a small stream. Twenty-four hours after the stream dispersal, there was no detectable increase in radiation above background measured anywhere along the stream site.

Following the experiments conducted at Cape Thompson in August 1962, the test plots were dug up and all dirt and other debris collected were transported in 55-gallon drums to a disposal site. At the disposal site the drums were emptied into the burial site prepared by bulldozing a trench down to permafrost. A total of 1,600 cubic feet of soil weighing 15,000 pounds was moved from the test plots to the burial site. Additional soil was then mixed with the material, and the disposal material was then buried with four feet of clean soil using a bulldozer. After burial of the material, there was no detectable radiation above background levels both at the surface of the burial site and at each of the test plots from which the disposal material had been excavated.

The full details of the experiment, except for identification of the Sedan fallout radioisotopes, were published by the scientists conducting the experiment. Copies were provided to the U.S. Geological Survey offices in Anchorage, Fairbanks, and Juneau, and have been available to the public since 1966. Photographs taken while the experiments were being conducted document that no protective clothing was worn by the participants.

As noted by Mr. O'Neill, the Atomic Energy Commission (AEC) notified the U.S. Geological Survey (USGS) on January 23, 1963, that the amounts of Cesium[137] and Strontium[85] left buried at Cape Thompson exceeded the amount allowed under federal regulations. The AEC requested a written statement or explanation detailing the quantities and physical and chemical form(s) of the materials buried; the method of burial; an environmental analysis of the site's topography, geology, and hydrologic characteristics; and an assessment of nearby facilities that might potentially be affected by the materials. The AEC also requested information on any corrective steps that had already been undertaken or which were planned for the future.[3]

The USGS replied to the Atomic Energy Commission by letter on February 28, 1963, noting that the AEC had authorized on site burial of remaining radioactive material when it approved the license to conduct the experiment for the experiment. The license approved use of up to 5 curies of mixed fission products with the understanding that of the radioactive material transported to Cape Thompson for the experiment, less than two percent would be returned to Denver for analysis, and over 98 percent would remain at Cape Thompson. The USGS provided the detailed information requested by the AEC. Although the quantities of radioactive materials buried at Cape Thompson exceeded permissible amounts under the U.S. Code of Federal Regulations, the materials posed no hazard because of the small amounts used, the shielding provided by intermixed and topcover soil (as demonstrated by the absence of detectable radiation above background levels atop the burial material), and the hydrologic and climatic conditions of the site.[4]

On March 7, 1963, the AEC replied to the USGS indicating appreciation for their cooperation in providing details of the disposal[5]. In a memo dated April 10, 1963, all activities regarding the status of the experimental site were summarized by the AEC, Division of Licensing and

Regulation (DL&R). The AEC DL&R concluded, "We believe no further action is warranted," and "In summary, we (at last) feel satisfied the radioactive waste mound at the Chariot site does not represent a health and safety problem and...it can be abandoned."[6] No further action regarding the materials at Cape Thompson was recommended.[6]

After the radioisotopes and soil were buried in 1962, the site remained undisturbed. There was no disruption to the burial site topcover until 1992 when samples were taken as part of the current effort to evaluate the site. Atop the burial site, there remains no detectable radiation exposure above the background levels of the area. Background radiation levels in the area are low, ranging from 3 to 6 microRoentgens per hour--26 to 52 milliRoetgens per year. The background and current levels of radiation at the Cape Thompson site are no higher than levels at other areas in northwest Alaska.[7]

The amount of radioisotopes remaining in the disposal material in 1992 is considerably less than what was buried in 1962. Radioisotopes undergo spontaneous disintegration. This process results in the release of the high-energy particles, or gamma rays, referred to as ionizing radiation. Iodine^{131} has a half-life of 8 days. Strontium^{15} has a half-life of 64 days. During the past 30 years, these radioisotopes have completely disintegrated and no longer are a source of radiation at Cape Thompson. Cesium^{137} has a half-life of 30 years: Of the 6 millicuries of Cesium^{137} buried in 1962, only 3 millicuries remain in the disposal site. Similar reductions have occurred to the radioisotopes of the Sedan Fallout mixed fission products. Because information on the specific component isotopes of the Sedan Fallout material remains classified, a precise calculation of the remaining radioactivity of the Sedan Fallout material buried at the site is not possible at this time. Of the 24.3 millicuries of material buried in 1962, there remains a maximum of 11.3 millicuries of radioisotopes in 1992, assuming that the Sedan Fallout material has an extremely long half-life, and none of the material has undergone disintegration. Assuming that the Sedan Fallout disintegrates with a half-life of 30 years, only 7 millicuries would remain at present. The USGS estimates that the amount of radicactive material remaining at the Cape Thompson site is no more than 3-5 millicuries, and probably is less than 2 millicuries.[1]

When radioisotope atoms disintegrate, they release energy primarily in the form of particles (alpha and beta) and high energy photons--(gamma). Alpha particles are relatively large particles that can penetrate only 3 to 5 cm of air and are stopped by a thin sheet of paper and the outer layers of skin. Because alpha particles are unable to penetrate the outer skin, radioisotopes emitting alpha particles are only a risk if ingested or inhaled. Beta particles are lighter particles with higher penetration but are stopped in a few meters of air or a few millimeters of aluminum. Radioisotopes emitting beta particles potentially can be a health risk both for internal and external exposures. Radioisotopes emitting gamma rays present the most serious potential risk for external exposures because gamma rays are the most penetrating form of radiation. All forms of radiation are attenuated by passage through solid materials. Glass and plastic are commonly used for shielding against beta radiation, and concrete and lead for x-ray and gamma radiation.

At Cape Thompson very effective shielding was and is still provided by the soil that was mixed with the radioisotopes used in the experiments and the four-foot thick covering of clean soil put on top of the disposed radioisotopes. All remaining radioisotopes are continuing to undergo spontaneous disintegration with the release of radiation. The effectiveness of this shielding is demonstrated by the fact that there was no increase in radiation readings above background levels directly atop the disposal site in 1962, and as expected, none was detected in 1992.

The Department of Energy has calculated predictions of radiation exposures to individuals at Cape Thompson using computer modeling based on the amounts and types of radioisotopes used at the site. In a worst case scenario, if an individual were to have remained atop the burial site 24 hours per day for a full year, the most additional radiation he could receive from the site over and above background would be 10^{-3} milliRoentgen.[8] This amount of radiation is equivalent to about one millionth of a routine chest x-ray or to the exposure a person receives in nine hundredths of a second in a jet plane at cruising altitude. Even if the four feet of top cover were removed, the maximum additional radiation exposure to an individual lying in the disposal material 24 hours per day for a year would only be equal to the maximum recommended yearly radiation exposure for civilians of 100 milliR per year. (The recommended maximum permissible occupational exposure is 500 milliR per year.)

Ingestion of radioisotopes can present a potentially serious health risk. However in order to exceed maximum permissible quarterly ingestion limits for Cesium^{137}, one would have to consume over 16 cubic feet of the disposal material every three months. One would become sick from eating dirt long before ingesting enough Cesium^{137} to experience any short-term or long-term radiation-related health problems.

Background -- Effects of Radiation on Health

The health effects of a radiation exposure are dependent on a number of factors, including:

1. Total amount and type of radiation exposure.
2. Rate of exposure.
3. Method of exposure, i.e., internal--ingested or inhaled--or external exposure to the skin.
4. Amount of body exposed.
5. Individual variability.
6. Relative sensitivity of cells and tissues.
7. Parts of the body exposed.
8. Nutrition, oxygenation, and metabolic state of tissues exposed.[10]

Persons who receive an acute, whole-body exposure to a large dose of radiation may quickly experience serious injury or death, as seen at Hiroshima and Nagasaki in World War II or after the Chernobyl disaster in 1986. Exposures of only a portion of the body to high levels of radiation may cause tissue death in the area of exposure but leave the unexposed body tissues to function normally. One of the major components of cancer treatment is radiation therapy in

which cancer or tumor cells are killed using high doses of radiation focused onto the tumor or cancer cells.

Exposures to low amounts of radiation do not cause immediate effects, but potentially may cause damage to chromosomes or proteins within cells that may eventually progress to certain types of cancers. However, there are also enzymes within cells which repair cellular injuries caused by radiation and other toxic substances. For this reason people with exposure to a high dose of radiation may have little acute or long-term health effects if the exposure is received over an extended period of time, whereas an acute exposure to the same amount of radiation may produce severe injury or death.

We are all exposed continuously to small amounts of natural radiation. This natural radiation includes cosmic radiation in the form of galactic cosmic rays and solar particle radiation from the sun; and radiation in the ground and water arising from naturally-occurring radioisotopes uranium, actinium, and thorium, and their breakdown product isotopes. Radon, a naturally-occurring breakdown product of uranium[235], has recently gained much attention as a potential source of radiation exposure, especially in houses with unventilated basements built atop bedrock. The level of naturally-occurring or background radiation varies at different locations in the world, the United States, and Alaska. In general, terrestrial levels vary with the types of soil and rock in the area. Cosmic radiation varies with altitude and latitude.[11] For example, average background radiation exposures are approximately 150 milliRoetgens per year in San Francisco and 500 milliRoetgens per year in Denver, Colorado.[12]

Background exposure levels at the Project Chariot site at Cape Thompson, averaging 40 milliRoentgens per year, are much lower than those at San Francisco or Denver.[13] For comparison, the total annual radiation exposure at the Cape Thompson site is approximately equivalent to that of 4 chest x-rays or that received on eight round-trip, cross-country airline flights. One lateral lumbar spine x-ray provides a radiation exposure approximately 140 times that received in an entire year at the Cape Thompson site.

Exposures to low levels of radiation, including the low background radiation levels at the Cape Thompson site, do not raise the risk of development of cancer. No evidence of increased risk of cancer has been demonstrated with radiation exposures under 20 rads.[14,15] One would have to live at the Cape Thompson site for approximately 500 years to reach the minimum exposure level associated with possible increased risk of cancer.

Approximately 30 percent of the United States population develops cancer of some type during their lifetime, and 20 percent of the population dies of cancer. Exposure to 100 chest x-rays would increase the probability of developing cancer at some time in one's lifetime from 30.0% to 30.04%. In a population of 10,000 people, each exposed to 100 chest x-rays, 3,004 people would be predicted to develop some type of cancer rather than the 3,000 expected if each person in the population were not exposed to 100 chest x-rays. This additional risk is for all types of cancer. The increased risk for any specific cancer is much lower and is probably undetectable. Long-term follow-up studies of approximately 600,000 radiation workers with

occupational radiation exposures dating as far back as the early 1940s have not shown any association between occupational exposure to radiation and increased risk of cancer.

For a long time there has been a concern about cancer rates among native populations in Alaska. A number of studies have examined the rates of cancer and potential risk factors for the development of cancer in Native populations, including radiation exposure from nuclear fallout.[16]

Matthew McKenna recently studied cancer in the North Slope from 1984 to 1989.[17] He found that the age-adjusted cancer rate among North Slope residents was approximately 5 percent higher than the general cancer rate of the entire United States. When stratified by sex, male North Slope residents had a cancer rate 15 percent lower than the overall U.S. rate while female North Slope residents had a rate 25 percent higher than the U.S. rate. The age-adjusted cancer rate among residents of Point Hope was 38 percent higher than the overall U.S. rate; this difference was not statistically significant due to the small population of Point Hope residents. The eight cancers that were diagnosed in Point Hope residents from 1984 to 1989 included 2 cases of lung cancer, 2 cases of cervical cancer, and 1 case each of stomach, bone, colon and testicular cancer.

The common types of cancers associated with radiation exposure among Hiroshima and Nagasaki bomb survivors and others with known radiation exposure have included thyroid cancers, leukemia, multiple myeloma, and breast cancer in females.[18] None of these cancers was noted among Point Hope residents from 1984 to 1989.

Lung cancer and cervical cancer, the two cancers noted to be higher in frequency among North Slope residents than among the U.S. total population, are both associated with well-established risk factors. Lung cancer is strongly related to cigarette smoking. Risk factors for cervical cancer include early age at intercourse, numerous sexual partners, and history of sexually transmitted diseases.[19]

Concerns have been expressed that the buried radioisotope material may enter the food chain of Native subsistence hunters and their families through uptake by plants growing atop the burial site which are in turn eaten by caribou grazing at the site. Extensive research was done documenting the deposition of radionuclides in the arctic as a result of atmospheric nuclear tests in the 1950s.[20-23] Cesium[137] was shown to enter the food chain and was detectable in very low amounts in lichens, caribou, and Alaska Natives. In the 1980s several detailed studies reviewed all available findings and concluded that levels were so low as to be on no public health concern.[16,24]

Radioactive fallout from an above ground nuclear detonation normally settles at the earth surface where certain radioisotopes are absorbed by plants and enter the food chain. However, the radioisotopes at Cape Thompson were buried directly atop the permafrost and covered by four feet of topcover. The material is likely to be frozen most or all of the year; the material

is located well below the roots of the surface plants, precluding its introduction into the food chain.

Stutzman and Nelson studied cancer incidence among residents of villages in northern Alaska from 1969 to 1983, hypothesizing that an increase in cancers associated with radiadon exposure might be found in this population as a result of exposure to radioactive fallout from U.S. and Soviet nuclear testing of the 1950s and 1960s.[16] As part of their study they reviewed results of whole-body radioisotope burden measurements made during the 1960s.[10-23] The levels of radioisotopes in Point Hope residents were among the lowest of all the North Slope villages tested. Among North Slope residents the incidence of cancers associated with radiation exposure was lower than the U.S. rate. Increased rates of cancer of the nasopharynx and liver were found among North Slope men; similarly increased rates of cancer of the nasopharynx, gallbladder, cervix, and kidney were noted among North Slope women. Stutzman and Nelson concluded that changes in cancer incidence observed among North Slope residents were much more likely a result of changes in diet and behavior (especially use of tobacco), and infection with certain viruses, than a result of radiation exposure.

Conclusions and Recommendations

1. The radioisotopes buried at Cape Thompson present no health risk to subsistence hunters in the area or to persons living in nearby villages. They have never presented a risk and will not present a risk if left in their present state. The small amount of radiation released by the remaining radioisotopes is completely attenuated by the soil mixed with the radioisotopes in the disposal material and by the overlying topcover. Individuals remaining atop the burial site indefinitely would experience absolutely no increased health risk of radiation-related cancer or other health problems. Given the low background radiation levels at Cape Thompson, the risk of radiation-related cancers is lower than most other places in the United States.
2. All available evidence shows that past, current, and future potential health problems of residents of Point Hope are not related to radiation exposure at Cape Thompson. Epidemiologic studies of cancer among North Slope residents and Point Hope residents have not shown an excess of the types of cancers known from studies elsewhere to be associated with radiation exposure.
3. Given that the burial site presents absolutely no health risk, there is no indication for the site to be excavated or for the small amounts of remaining materials to be removed.
4. Potential exists for serious injuries or fatalities to occur if removal is attempted. Logistics are difficult. It would be tragic if anyone suffered an injury or fatality in an effort to clean up materials that pose no health threat to any living creature.
5. Removal of the material from the tundra at Cape Thompson would require the expenditure of millions of dollars. During this investigation the situation at Cape Thompson has been reviewed with a number of radiation physicists. When queried on whether the radioisotopes should be moved, the answer was uniformly and emphatically no. Money required for the Cape Thompson cleanup could be put to much better use studying health problems of North Slope residents and addressing the significant public health problems

facing Point Hope and other Alaskan villages and communities, including problems of smoking, alcohol, and vaccine-preventible diseases.

6. Given the strength of scientific evidence, major efforts need to be focused on communicating existing information to local residents. Essential are efforts to identify credible individuals who are trusted by local residents and to support a process that enables local residents and all other Alaskans to examine all the evidence. Supplemental funds should be made available to empower the local communities to assess evidence now available so they can regain control over their lives.

References

1. Arthur M. Piper. Potential effects of Project Chariot on Local Water Supplies Northwestern Alaska. U.S. Geological Survey, Professional Paper 539. U.S. Government Printing Office, Washington, D.C. 1966.
2. Letter from Arthur A. Baker, Acting Director, U.S. Geological Survey, to U.S. Atomic Energy Commission dated February 28, 1963.
3. Letter dated January 23, 1963, to the Director, U.S. Geological Survey, from Eber R. Price, Assistant Director, Division of Licensing and Regulation, U.S. Atomic Energy Commission.
4. Letter dated February 18, 1963 to the U.S. Atomic Energy Commission, Division of Licensing and Regulation, from Arthur A. Baker, Acting Director, U.S. Geological Survey.
5. Letter dated March 7, 1963 to Arthur A. Baker, Acting Director, U.S. Geological Survey, from Ralph G. Page, Chief, Enforcement Branch, Division of Licensing and Regulation.
6. Memo dated April 10, 1963, from John Philip, Director, Special Projects to Ray Emens, Director, Support Division, Nevada Operations Office.
7. Telephone call with Tom Gerusky, Department of Energy.
8. Letter dated September 14, 1992 from James Devine, Assistant Director for Engineering Geology, U.S. Geological Survey, to the Deputy Assistant Secretary for Water and Science, Assistant to the Secretary for Alaska.
9. Information provided by Dr. Tom Gerusky, Department of Energy.
10. Radiation uses and protection, Chapter 7, in Environmental Engineering and Sanitation.
11. RJ Fry, SA Fry. Health effects of ionizing radiation. Medical Clinics of North America 74, March 1990; 475-488.
12. Environmental Engineering and Sanitation, p. 685.
13. Information provided by Dr. Tom Gerusky, Department of Energy.
14. Information provided by Dr. Shirley A. Fry, Applied Research and Technical Assistance Programs, Oak Ridge Institute for Science and Education.
15. Letter dated November 4, 1992 from Dr. Shirley A. Fry. Oak Ridge Institute for Science and Education, to Bruce P. Chandler, M.D., Section of Epidemiology, Alaska Division of Public Health.
16. CD Stutzman, DM Nelson, AP Lanier. Estimates of cancer incidence in Alaskan Natives due to exposure to global radioactive fallout form atmospheric nuclear weapons testing. Alaska Medicine 1986; 28: 67-77.
17. MT McKenna. Cancer in the North Slope Borough 1984 to 1989.
18. E Radford. Ionizing Radiation in Last. ed, Preventive Medicine and Public Health, p. 726-734.
19. MT McKenna. Cancer in the North Slope Borough 1984 to 1989.
20. Hanson WC. 137 Cs concentrations in northern Alaskan Eskimos, 1962-79: effects of ecological, cultural, and political factors. Hlth Phys 1982; 42: 433-447.
21. Hanson WC, Palmer HE, Griffin BI. Radioactivity in northern Alaskan Eskimos and their foods, summer 1962. Hlth Phys 1964; 10: 421-429.
22. Palmer HE, Hanson WC, Griffin BI, Fleming DM. Radioactivity measurements in Alaskan Eskimos in 1963. Science 1964; 144: 859-860.
23. Hanson WC. Fallout radionuclides in Alaskan food chains. Am J Vet Res 1966; 27: 359-366.
24. Arctic Air Pollution. B Stonehouse, ed. Cambridge University Press © 1986. Cambridge.

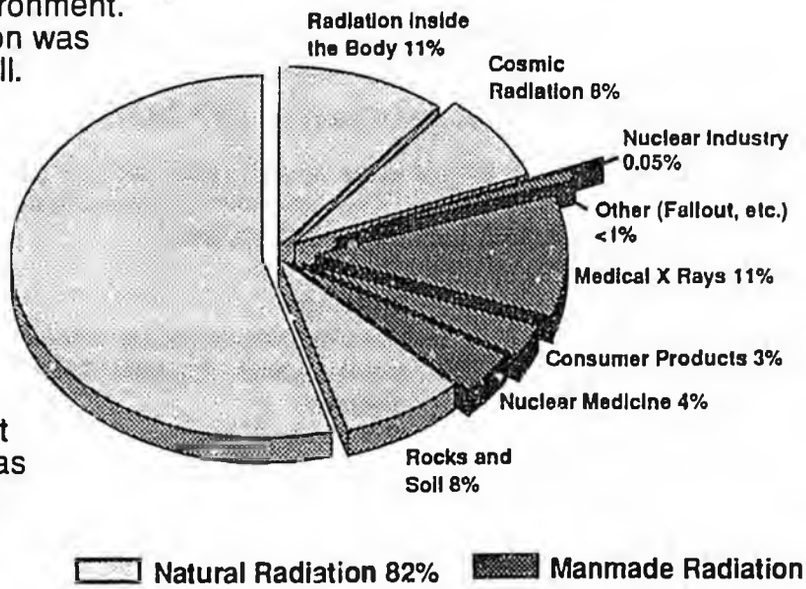
DOE/EM-0065P

Radiation in the Environment

- *Background radiation*
- *Manmade radiation*
- *Units of Measure*

Radiation is a natural part of our environment. When our planet was formed, radiation was present, and radiation surrounds it still. Natural radiation reaches earth from outer space and continuously radiates from the rocks, soil, and water on the earth. During the last century, humankind discovered radiation, how to use it, and how to control it.

Many materials, both natural and manmade, are radioactive. These materials are composed of atoms that release energetic particles or waves as they change (decay) into more stable forms. These particles and waves are referred to as radiation and their emission as radioactivity.



As the pie chart shows, most background radiation (82%) is from natural sources. By far the largest source is radon, an odorless, colorless gas given off by natural radium in the Earth's crust. Manmade radiation, mostly from medical uses and consumer products, accounts for about eighteen percent of our total exposure, and the nuclear industry is responsible for less than one percent.

Units of Measure

Radiation can be measured in a variety of ways. Typically, units of measure show either 1) the radioactivity present in a substance, or 2) the radiation being given off.

The radioactivity of a substance is measured in terms of the decay per unit of time. The curie is the standard unit for this measurement and is based on the amount of radioactivity contained in 1 gram of radium. Numerically, 1 curie is equal to 37 billion disintegrations per second. The amounts of radioactivity that people normally work with are in the millicurie (one-thousandth of a curie) or microcurie (one-millionth of a curie) range. Levels of radioactivity in the environment from both

Radiation that has enough energy to cause a change in the atomic balance of substances it passes through is called ionizing radiation. There are three basic forms of ionizing radiation.

Alpha particles are the largest and slowest moving type of radiation. They are easily stopped by a sheet of paper or the skin. Alpha particles can move through the air only a few inches before being stopped by air molecules.

Beta particles are much smaller and faster moving than alpha particles. Beta particles pass through paper or skin and can travel in the air for about 10 feet. However, they can be stopped by a thin shielding such as a sheet of aluminum foil.

Gamma radiation is a type of electromagnetic wave that travels at the speed of light. It takes a thick shield of steel, lead, or concrete to stop gamma rays. X-rays and cosmic rays are examples of gamma radiation.

U.S. Department of Energy
Office of Environmental Restoration and Waste Management
November 1991

natural and man-made sources are in the picocurie (one-trillionth of a curie) range.

Radiation levels are measured in various units. Radiation absorbed by humans is measured in either rad or rem. The rem is the most descriptive because it measures the ability of the specific type of radiation to do damage to biological tissue. Again, typical measurements are often in the millirem (mrem), or one-thousandth of a rem, range. On the average, Americans receive about 360 mrem of radiation a year. Most of this (97%) is from natural radiation and medical exposure.

Common Sources of Radiation

Because the radioactivity of individual samples varies, the numbers given here are approximate or represent an average. They are shown to provide a perspective for concentrations and levels of radioactivity rather than dose.

mrem = millirem
pCi = picocurie

Cosmic Radiation

Cosmic radiation is high-energy gamma radiation that originates in other space and filters through our atmosphere.

Sea Level . . . . . 26 mrem/year
(increases about 1/2 mrem for each additional 100 feet in elevation)
Atlanta, Georgia . . . . . 31 mrem/year
(1,050 feet)
Denver, Colorado. . . . . 50 mrem/year
(5,300 feet)
Minneapolis, Minnesota . 30 mrem/year
(815 feet)
Salt Lake City, Utah . . . . 46 mrem/year
(4,400 feet)

Terrestrial Radiation

Terrestrial sources are naturally radioactive elements in the soil and water such as uranium, radium, and thorium. Average levels of these elements are 1 pCi/gram of soil.

United States (avg.) . . . . 26 mrem/year
Denver, Colorado. . . . . 63 mrem/year
Nile Delta, Egypt . . . . . 350 mrem/year
Paris, France . . . . . 350 mrem/year
Coast of Kerala, India . . 400 mrem/year
McAlpe, Brazil . . . . . 2,558 mrem/year
Pacos De Caldas
Brazil . . . . . 7,000 mrem/year

Buildings

Many building materials, especially granite, contain naturally radioactive elements.

U.S. Capitol Building . . . . . 85 mrem/year
Base of
Statue of Liberty . . . . . 325 mrem/year
Grand Central Station. . . . 525 mrem/year
The Vatican . . . . . 800 mrem/year

Radon

Radon levels in buildings vary, depending on geographic location, from 0.1 to 200 pCi/liter.

Average Indoor
Radon Level . . . . . 1.5 pCi/liter
Occupational Working
Limit . . . . . 200.0 pCi/liter

Food

Food contributes an average of 20 mrem/year, mostly from potassium-40, carbon-14, hydrogen-3, radium-226, and thorium-232.

Beer . . . . . 390 pCi/liter
Tap Water. . . . . 20 pCi/liter
Milk . . . . . 1,400 pCi/liter
Salad Oil . . . . . 4,900 pCi/liter
Whiskey . . . . . 1,200 pCi/liter
Brazil Nuts . . . . . 14 pCi/g
Bananas . . . . . 3 pCi/g
Flour . . . . . 0.14 pCi/g
Peanuts & Peanut Butter . . . . . 0.12 pCi/g
Tea . . . . . 0.40 pCi/g

Medical Treatment

The exposures from medical diagnosis vary widely according to the required procedure, the equipment and film used for X-rays, and the skill of the operator.

Chest X-Ray . . . . . 10 mrem
Dental X-Ray, Each . . . . . 100 mrem

Consumer Goods

Cigarettes - two packs/day
(polonium-210) . . . . . 8,000 mrem/year
Color Television . . . . . <1 mrem/year
Gas Lantern Mantle
(thorium-232) . . . . . 2 mrem/year
Highway Construction . . . . 4 mrem/year
Airplane Travel at 39,000 feet
(cosmic) . . . . . 0.5 mrem/hour
Natural Gas Heating and Cooking
(radon-222) . . . . . 2 mrem/year
Phosphate Fertilizers . . . . . 4 mrem/year
Porcelain Dentures
(uranium) . . . . . 1,500 mrem/year
Radioluminescent Clock
(promethium-147) . . . . . <1 mrem/year
Smoke Detector
(americium-241) . . . . . 0.01 mrem/year

International Nuclear Weapons Test Fallout from pre-1980 atmospheric tests

average for a U.S.
citizen . . . . . 1 mrem/year

References

Effect of Ionizing Radiation on Human Health, The. Arthur C. Upton. New York University Medical Center. Atomic Industrial Forum, 1984.
Effects on Populations of Exposure to Low Levels of Ionizing Radiation. 1980. Committee on the Biological Effects of Ionizing Radiation. National Academy Press, 1984.
Ionizing Radiation Exposure of the Population of the United States. Report Number 93. National Council on Radiation Protection and Measurements, 1987.
Radiation Exposure of the U.S. Population from Consumer Products and Miscellaneous Sources. Report Number 95. National Council on Radiation Protection and Measurements, 1987.
Radiation in Medicine and Industry. A.P. Jacobsson and G.P. Sakolosky, 1980.
Radioactivity in Consumer Products. U.S. Nuclear Regulatory Commission, 1978.

U.S. Department of Energy
Office of Environmental Restoration
and Waste Management
November 1991

DOE/EM-0064P

Perspectives on Radioactivity

- *Measuring radioactivity*
- *Radioactivity in household materials*
- *Radioactivity in industry*

Radioactivity is a naturally occurring phenomena that is part of nature. It comes from cosmic rays, the sun, the earth, and manmade sources. Natural radiation is called "background radiation" and makes up about 82% of the average person's daily exposure to radiation. Medical sources, such as X-rays, make up the majority of the rest of our exposure. Nuclear materials production activities account for less than 1% of all radioactivity.

Although discovered only in the last century, radioactivity is one of the most widely studied and best understood of all natural phenomena. Radioactivity stems from the activity of atoms, the building blocks of matter. All things, whether natural or manmade, are made up of atoms. Some atoms are stable, which means they retain their form and substance forever. Others are unstable and change readily to different forms. As atoms "transform" or decay, they emit radioactivity in the form of waves and particles.

The amount of time atoms take to become stable varies greatly and is measured in "half-lives." One half-life is the amount of time required for one-half of a given quantity of a radioactive element to stop emitting radioactivity. The half-life, along with the kind of radiation emitted and its energy level or activity, is important in determining the degree of hazard from any given radioactive substance.

Measuring Radioactivity

The curie is a standard measure for the amount of radioactivity contained in radioactive material. It was named after the French scientist Marie Curie for her landmark research into the nature of radioactivity.

The basis for the curie is the radioactivity of one gram of radium, the source of radon. Radium decays at a rate of about 2.2 trillion disintegrations (2.2×10^{12}) per minute. A

Unit of Radioactivity	Symbol	Disintegrations Per Minute	Dollar Analogy	Examples of Radioactive Materials
1 Curie	Ci	2×10^{12} or 2 Trillion	2 Times the Annual Federal Budget	Nuclear Medicine Generator
1 Millicurie	mCi	2×10^{9} or 2 Billion	Cost of a New Interstate Highway from Atlanta to San Francisco	Amount Used for a Brain or Liver Scan
1 Microcurie	µCi	2×10^{6} or 2 Million	All-Star Baseball Player's Salary	Amount Used in Thyroid Tests
1 Nanocurie	nCi	2×10^{3} or 2 Thousand	Annual Home Energy Costs	Consumer Products
1 Picocurie	pCi	2	Cost of a Hamburger and Coke	Background Radiation Levels

This chart shows the relative differences between units of radioactivity and gives approximate analogies in dollars. The number of disintegrations per minute has been rounded off to the nearest whole number.

U.S. Department of Energy
Office of Environmental Restoration
and Waste Management
November 1991

picocurie is one trillionth of a curie. Thus, a picocurie represents 2.2 disintegrations per minute.

To put the relative size of one trillionth into perspective, consider that if the Earth were reduced to one trillionth of its diameter, the "pico earth" would be smaller in diameter than a speck of dust. In fact, it would be six times smaller than the thickness of a human hair.

The difference between the curie and the picocurie is so vast that other metric units are used between them. These are as follows:

Millicurie = 1/1,000 (one thousandth) of a curie

Microcurie = 1/1,000,000 (one millionth) of a curie

Nanocurie = 1/1,000,000,000 (one billionth) of a curie

Picocurie = 1/1,000,000,000,000 (one trillionth) of a curie

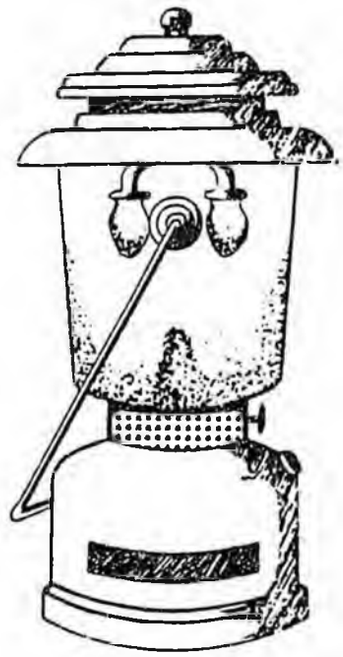
Around the House

Many household products emit a small amount of radioactivity or use radioactive materials. Examples include microwave ovens, smoke detectors, dentures, color televisions, camera and eyeglass lenses, and anti-static brushes. The radioactive component is added to the products either specifically to make them work or as a result of using compounds of elements like thorium and uranium in producing them. The amount of radiation the products give off is very small and is not hazardous.

Building materials such as brick and stone contain radioactivity. Thus, a home made from wood would have a lower level of background radiation than one built from bricks or stone such as granite. Because of cosmic rays, a person living at an altitude of five thousand feet in Denver, Colorado, receives nearly twice as much cosmic radiation from outer space as a person living at sea level in Washington, D.C. Similarly, high concentrations of radioactive minerals in beach sand in Brazil and India expose local residents to between ten and 100 times the levels of background radiation in the U.S. Even the human body contains very low-level radioactive materials. Every person has 500,000 atoms decaying in our bodies every minute. And some foods which are essential to good health contain naturally occurring radioactive elements, such as potassium-40 and carbon-14.

Lanterns: In a New Light

About 20 million gas lantern mantles are used by campers each year in the United States. Under today's standards, the amount of natural radioactivity found in a lantern mantle would require precautions in handling it at many government or industry sites. The radioactivity present would contaminate 15 pounds of dirt to above allowable levels. The average mantle contains 1/3 of a gram of thorium oxide, which contains approximately 100,000 picocuries per gram. The approximately 35,000 picocuries of radioactivity in the mantle would, if thrown onto the ground, be considered low-level radioactive contamination at a government or industry facility. However, the radiation from a gas lantern mantle is far less than the average chest X-ray.



Radiation and Industry

In addition to medical uses, defense applications, energy generation, and consumer products, radiation is used in industry. For example, radiography is used in much the same way as doctors use X-rays. It locates defects in metal casings and welds that are hard to detect. It determines microscopic thicknesses of materials, such as metal foils, and the amount of adhesive on masking tape. Radiography can also locate structural defects in statues and buildings. Archaeologists use a technique involving the radioactive decay of carbon-14 to date prehistoric objects accurately. Radiation can also be used to validate the authenticity of artwork.

U.S. Department of Energy
Office of Environmental Restoration and Waste Management
November 1991

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

OFFICE OF THE COMMISSIONER
410 WILLOUGHBY AVENUE, SUITE 105
JUNEAU, AK 99801-1795

Phone: (907) 465-5000
Fax: (907) 465-5070

March 18, 1993

The Honorable Walter J. Hickel
Governor of the State of Alaska
P.O. Box 11011
Juneau, Alaska 99801

Dear Governor Hickel:

Last September 25th you asked the State Emergency Response Commission (SERC) to conduct a review of radiological threats facing Alaskans and the preparedness of federal, state and local agencies to respond to those threats. Enclosed is that review.

As you can see, the SERC made five recommendations at this time, as detailed in the summary, for further follow up. At the same time, we addressed and gave you the status of a number of initiatives already taken by your administration to protect Alaskans from radiological threats, domestic and foreign.

In the reference section of the report, you will also see additional recommendations which were not yet adopted by the SERC. Among them, and worthy of further debate in your cabinet, are the continuing State approach to Project Chariot and the cleanup, improved radon monitoring and mitigation, the issue of whether or not to seek primacy on nuclear regulation from the federal government, and improvements to the State's monitoring capability.

In the months to come, the SERC will be following up with you on these recommendations. We would propose to further develop a plan for consolidation of agency efforts and rationalization of Alaska's laws, and work with the Legislature in the interim. We are also prepared to do whatever you choose to convey these needs and recommendations to the federal government. In addition, let me say that we are thankful for the presence of organizations such as the Northern Forum and the Arctic Environmental Protection Strategy that provide a mechanism, for the first time, for serious discussion of these issues in the arctic. Your leadership in raising these issues with the highest levels of Russia's government has also been very helpful.

Finally, we would like to thank the North Slope Borough, the federal and state agencies, and the private individuals who contributed to this report in so short a time. We will follow up with you to convey this report to the federal decision makers wherever necessary.

Best regards.

Sincerely,

John A. Sandor
Commissioner

MT/CS/hsb (g:\comm\hickel.ltr)

Enclosure: Preliminary Report to Governor Walter J. Hickel: *Radiological Threats and Release Response Preparedness in the State of Alaska*, March 1993

cc Members of the State Emergency Response Commission
Members of the Emergency Response Committee of the SERC
Members of the Alaska Legislature

Preliminary Report to Governor Walter J. Hickel

Radiological Threats and Release Response Preparedness in the State of Alaska

March 1993

Prepared by the Alaska State Emergency Response Commission, Emergency Response Committee