

DEC

Overview

Hearings

1/27/92

TELECONFERENCE PARTICIPATION

SPONSOR (S) Resources

DATE/TIME 1/27/92 1:30 - 3:30

SUBJECT DEC Overview

LIO'S

(moderator)

	TESTIFY	OBSERVE	TESTIFY	OBSERVE
ANCHORAGE ( )	E. Piper - DEC S. Brandt - Erichsen - DEC Simon Mawson - DEC		PETERSBURG * ( )	
BARROW * ( )			SITKA ( )	
BETHEL ( )			SOLDOTNA ( )	Les Buchholz - DEC Bob Krogseng - DEC
DELTA JUNCTION * ( )			VALDEZ * ( )	
DILLINGHAM * ( )			LTC'S	
FAIRBANKS ( )	Pete McGee - DEC Paul Bateman - DEC		HOMER	
GLENNALLEN * ( )			WRANGELL	
JUNEAU ( )			OFFNETS	
KETCHIKAN ( )			OFF1	
KODIAK ( )			OFF2	
KOTZEBUE ( )			OFF3	
MAT-SU ( )			OFF4	
NOME ( )			OFF5	
			OFF6	

VTS'S ON BACK

\* SESSION ONLY

VOLUNTEER TELECONFERENCE SITES

AKK - Akhoik	AMB - Ambler
AND - Anderson	ANG - Angoon
BUC - Buckland	CAN - Cantwell
CHE - Chenega Bay	CHG - Chignik
CHL - Chignik Lake	CHN - Chiniak
CHS - Chistochina	CHI - Chitina
COP - Copper Center	COR - Cordova
CRA - Craig	DEE - Deering
DOT - Dot Lake	EAG - Eagle
ELF - Elfin Cove	FTY - Fort Yukon
GAK - Gakona	GAL - Galena
GAM - Gambell	HNS - Haines
HEA - Healy	HOO - Hoonah
HPB - Hooper Bay	HYD - Hydaburg
HYR - Hyder	KAK - Kake
KAT - Kaktovik	KAU - Karluk
KAS - Kasaan	KEN - Kenny Lake
KIA - Kiana	KIV - Kivalina
KLA - Klawock	KOB - Kobuk
LAB - Larsen Bay	MES - Mentasta Lodge
MET - Metlakatla	NAK - Naknek
NEN - Nenana	NEW - Newhalen
NIK - Nikiski	NOA - Noatak
NOO - Noorvik	NPT - North Pole
NOW - Northway	NUI - Nuiqsut
OUZ - Ouzinkie	PEL - Pelican
PTA - Port Alexander	PTH - Point Hope
PTL - Port Lions	PTP - Port Protection
STP - Saint Paul	SND - Sand Point
SAV - Savoonga	SLW - Selawik
SEL - Seldovia	SEW - Seward
SHS - Shishmaref	SHU - Shungnak
SKG - Skagway	SLA - Slana
TAT - Tatitlek	TKS - Tenakee Springs
TNB - Thorne Bay	TOG - Togiak
TOK - Tok	TSK - Toksook Bay
UNK - Unalakleet	UAK - Unalaska
WAI - Wainwright	WHT - Whittier
YAK - Yakutat	

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ADMINISTRATIVE SERVICES  
FY 93 REQUEST**

	Federal Funds	General Funds	Other State Funds	Total Funds	PFT	PPT
FY92 AUTH.	\$ 253.4	\$1,603.2	\$ 270.8	\$ 2,127.4	39	1
FY93 REQ.	392.4	1,698.0	324.6	2,415.0	40	0
<b>CHANGE</b>	<b>\$ 139.0</b>	<b>\$ 94.8</b>	<b>\$ 53.8</b>	<b>\$ 287.6</b>	<b>1</b>	<b>(1)</b>

**PROGRAM DESCRIPTION:**

The Administrative Services Division provides centralized budgeting, accounting, fund administration, supply, payroll, personnel/human resource services, data processing support, public information services, and a Departmentwide Quality Control Section.

**PROGRAM CHANGES FY93:**

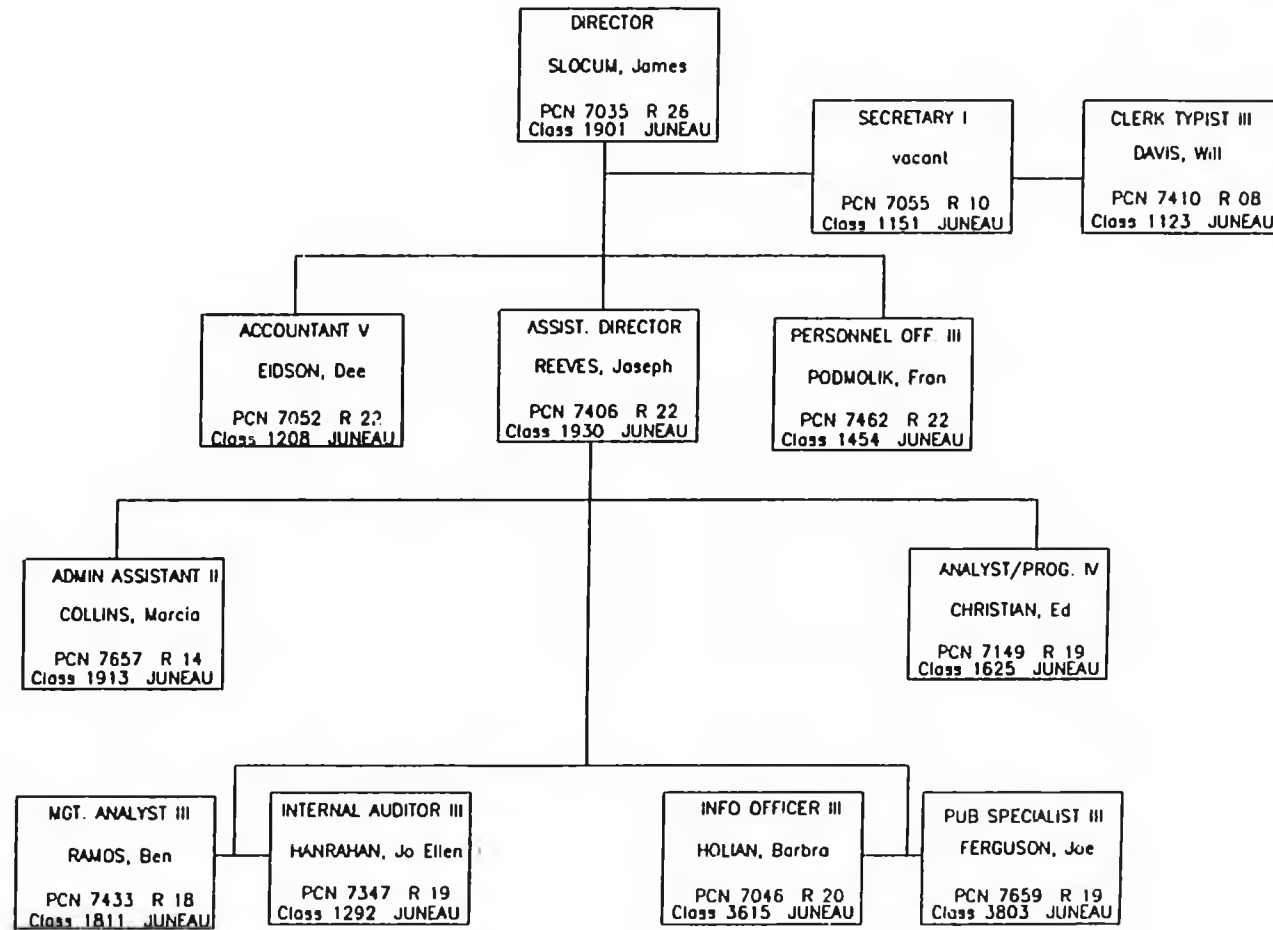
**Transfers Within Adjusted Base:**

- Personal Services funds were transferred to the Department of Education, Division of State Libraries to fully fund one PFT Librarian to provide support to the DEC Library. Previous funding provided via RSA.
- Transferred one PFT Risk Management Officer to SPAR's Spill Response Office to make safety personnel readily available to provide immediate technical safety assistance and expertise to the Department's responders statewide, or to respond to an incident when a situation warranted or was needed.
- Transferred in two PFT positions from E2 to meet reorganization goals of the Department which places emphasis for Public Information and Management Analysis in the Division to maximize efficiency.
- SPAR Division transferred in personal services to fully fund one existing accounting technician to support OHSSRF programs.

**Increment/Decrement Requests:**

- Due to general fund shortfalls within the Division's allocated operating budget, one PPT Information Officer working in the Office of the Governor's Media Center is being deleted. The assigned duties of this position will be picked up by other DEC information officers and the Governor's Media Center.
- To reduce the Division's high personal services forced underfunding, the Federal Indirect Recovery has been negotiated from 9.29 % to 19.63 % to enable State and Federal centralized program delivery commitments to be accomplished.

# DIRECTOR'S OFFICE



Approved \_\_\_\_\_  
DIRECTOR DATE

### Summary Report of Northern Region Objectives/Activities

Regional and District Office staff implement the policies and procedures developed by the Commissioner and the central office staff, and enforce the department's statutes and regulations.

Major ongoing activities, by program, are as follows.

#### Spill Prevention, Planning Management:

Work with the regulated facilities to ensure that each has an approved contingency plan consistent with the revised regulations.

#### Contaminated Sites:

NPL Sites      Eielson AFB  
                    Ft. Walnwright  
                    Arctic Surplus  
                    Alaska Battery

FMUS  
UAF Power Plant  
Illinois/Minnie Connector  
Railroad Industrial Area

#### Water/Wastewater Management:

Work with rural villages through the community agreements to improve monitoring and sampling compliance.  
Work with Cominco and EPA to get a year round NPDES permit in place for the Red Dog mine tailings pond discharge.  
Assist where ever possible in permitting for the Fort Knox project.

#### Water Quality Management:

Work with the Corps of Engineers and the FNSB to resolve wetlands issues within the Borough (possible General Permit)

#### Air Quality Management:

Implement modifications to the program necessary as a result of the CAAA 90.  
Healy Clean Coal Project  
Red Dog Ambient Air Lead

#### Solid/Hazardous Waste:

Work with the FNSB in siting a new landfill.  
Work with the rural villages through community agreements to bring their landfills up to standard.

## MAJOR ACTIVITIES and CHALLENGES SOUTHCENTRAL REGION

- \* Oil spill prevention in Cook Inlet and other parts of the Region.

The recent KPL spill in Cook Inlet demonstrated vast improvement in oil spill response capability. The success of the response in terms of oil recovery is still being evaluated.

- \* Environmental Infrastructure in Rural Alaska

Solid waste, drinking water and wastewater present problems in most rural areas of the State. Steady and regular improvement on all Fronts is a high priority for the Southcentral Region.

- \* Fish Processing Industry

Fish processing is one of the largest industries in the Region. We will be making a special effort to assure consistent application of environmental requirements to both onshore and off shore Fish Processors.

- \* Leaking Storage Tanks and Contaminated Sites

The Southcentral Region includes a substantial portion of the urbanized areas of the State. A legacy of past practices, which we share with other parts of the country, is a large number of contaminated sites and leaking underground storage tanks. Progress in cleaning up these sites is a priority for the Region.

**SOUTHEAST REGIONAL OFFICE  
PRIORITY ISSUES AND TASKS  
FISCAL YEAR 92**

**Community Agreements with southeastern municipalities.** Ketchikan Gateway Borough signed. City of Ketchikan, City of Haines, Haines Borough, and a regional partnership with the Southeast Conference await signing.

**Incorporation of pollution prevention objectives into permits and enforcement actions.**

**Mixing zones for wastewater discharges for the AJ and Kensington Mines.**

**Renewals of federal discharge permits for both Alaska Pulp in Sitka and Ketchikan Pulp.**

**Air Quality Permits for Ketchikan Pulp, Alaska Pulp, the Kensington Project, the AJ Project, the Wrangell Sawmill, and the Green's Creek Mine.**

**Permits or Compliance Orders by Consent for solid waste facilities in Ketchikan, Petersburg and Wrangell.** All three communities are at critical junctures; baling or incineration, new or expanded landfills, liners or no liners, etc.

**Collection and disposal of household hazardous waste from southeastern communities.** The Southeast Conference favors a mobile system.

**Hazardous and solid waste management in remote camps.** A workshop in Sitka on February 18-19 is designed to avoid another "Rowan Bay."

**Public drinking water safety.** Technical assistance and enforcement to ensure monitoring compliance and solutions.

**Cruiseship smoke.** Binding agreements with cruiseship companies are expected to decrease problems in the summer of '92.

**Amendment of 29 Oil Spill Contingency Plans.**

**Investigation of contamination of Skagway Public Drinking Water Supply.** Low levels of trichloroethylene exist in the groundwater supply.

**Management of soils contaminated by diesel and gasoline.** Remediation to avoid problems and use remediated soils is the key.

# STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

## DEPT. OF ENVIRONMENTAL CONSERVATION

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JANUARY 27, 1992 SENATE RESOURCES COMMITTEE HEARING  
OVERVIEW OF DEPARTMENT OF ENVIRONMENTAL CONSERVATION PROGRAMS  
BY JOHN A. SANDOR, COMMISSIONER, DEPT. OF ENVIRON. CONSERVATION

Mr. Chairman, it is a pleasure to present to the Senate Resources Committee, an overview of Department of Environmental Conservation (DEC) Programs. I have with me DEC, Deputy Commissioner Mead Treadwell; Special Assistant to the Commissioner, Janice Adair; the five Directors of DEC Divisions: Environmental Health, Kit Ballentine; Facilities Construction and Operation, Keith Kelton; Spill Prevention and Response, Mike Conway; Environmental Quality, Michael Menge; and the Administrative Services Director, James Slocum. We have prepared written presentations of DEC programs and activities, and are prepared to briefly summarize these if you wish.

The Southeast Region Administrator, Dick Stokes is also here; and the three other Region Administrators: Northern Region (Fairbanks), Pete McGee; Southcentral Region (Anchorage), Svend Brandt-Erichsen; and the Pipeline Corridor Region (Anchorage), Simon Mawson are on teleconference to be available for any questions you may wish to direct to them. Ernie Piper, the State-On-Scene Coordinator for the Exxon-Valdez Oil Spill is also available for questions by teleconference.

### COMMISSIONER'S OVERVIEW

Mr. Chairman, attached to this statement is a summary of the DEC, 1991-1992 Program Objectives that were developed early in 1991 and then up-dated at the beginning of this Fiscal Year.

If you agree, I would like to summarize our progress to date in achieving these objectives and identify some of the special challenges we face in this calendar year, and in future years on these and related environmental conservation objectives.

This Department looks forward to your Committee's review of these objectives and any advice and actions you may have to strengthen our Department's programs, and to meet the challenges and overcome the problems identified.

1. WORK COOPERATIVELY WITH COMMUNITIES & OTHER STATE/FEDERAL AGENCIES IN ADMINISTERING LAWS, REGULATIONS AND PROGRAMS WHICH PROTECT AND IMPROVE THE ENVIRONMENT. DEVELOP COST-EFFECTIVE PROGRAMS AND SOLUTIONS TO ENVIRONMENTAL PROBLEMS.

PROGRESS: The DEC has developed Cooperative Agreements and other forms of partnership arrangements with over thirty communities and other government agencies. These include:

Cooperative Community Environmental Agreements- Over forty final and draft agreements have been developed; under these agreements, environmental issues and problems are identified and the DEC works with these communities in developing cost-effective programs and solutions to these problems. A brief status report on the community agreements will be presented during this overview.

Cooperative Agreement Between United States Department of Defense Agencies/United States Coast Guard Units in Alaska and the Alaska Department of Environmental Conservation  
This agreement establishes a common agenda to work together on specific environmental protection goals. This includes special initiatives to prevent pollution and efforts to solve environmental problems in a cost-effective manner.

CHALLENGES: The State and communities must comply with stricter Federal/State laws and regulations. The increased costs associated with these programs are a major challenge for the communities and the State (e.g. Clean Water Act & Clean Air Act)

2. PROTECT PUBLIC/ENVIRONMENTAL HEALTH; WORK CLOSELY WITH THE DEPARTMENTS OF HEALTH & SOCIAL SERVICES; COMMUNITY & REGIONAL AFFAIRS; PUBLIC HEALTH SERVICE; FOOD & DRUG ADMINISTRATION AND PRIVATE INDUSTRY TO ASSURE PROTECTION OF PUBLIC HEALTH

PROGRESS: Special emphasis was given to strengthening our Seafood Program this past year. Seafood Inspections in 1991 totaled 1,418 compared to 710 in 1990 and 782 in 1989. We improved handling of fish products. Quality inspections and improved training have increased the credibility of Alaska Seafood Products

CHALLENGES: The January, 1992 Consumer Reports article and related coverage on fish products safety illustrates the importance of emphasizing this program. The DEC is working closely with the Alaska Seafood Marketing Institute (ASMI), the Food & Drug Administration and other State/Federal agencies to deal with this unfortunate report. We are prepared to give this Committee a special briefing on this issue at this hearing.

3. EMPHASIZE POLLUTION PREVENTION IN ALL DEPARTMENT PROGRAMS,  
COMMUNITY AGREEMENTS AND IN INFORMATION-EDUCATION ACTIVITIES

PROGRESS: This past fall, Alaska received a grant of \$270,000 from the Environmental Protection Agency (EPA) for a state-wide effort to integrate pollution prevention and energy conservation with local communities and governments, private industry, consumers, native groups and schools. This and related efforts will attempt to integrate pollution prevention in all DEC programs. This offers the best promise to avoid the damage, costs and health threats associated with environmental degradation.

CHALLENGE: Pollution prevention offers the most cost-effective approach to environmental protection, yet its full potential can only be realized when all citizens, government and the private sector work together to achieve this objective. The GREEN STAR program by private industry and the environmental community in Anchorage is a good start.

4. COMPLETE CLEAN-UP OF THE EXXON-VALDEZ OIL SPILL; CONTINUE  
DAMAGE ASSESSMENT AND REMEDIATION WORK; SEEK FULL RECOVERY OF  
DAMAGES RESULTING FROM THIS OIL SPILL.

PROGRESS: There was excellent cooperation in the Federal/State and Industry clean-up work in 1991, and plans are underway for the remaining clean-up planned for this year. The Settlement Agreement now enables us to move forward with restoration work, and the Trustee Council organization frame-work is being developed to accomplish this task.

CHALLENGE: A public participation plan has been developed to involve communities impacted by the spill in the restoration process. A partnership effort between Federal/State/local communities will help assure an effective restoration program.

5. IMPROVE AND REFINE SPILL PREVENTION AND RESPONSE PLANS AND  
ACTION PROGRAMS; WORK COOPERATIVELY WITH ALL PUBLIC & PRIVATE  
ORGANIZATIONS TO ACHIEVE THIS OBJECTIVE.

PROGRESS: New Oil Spill Regulations (mandated by HB 567) were signed in October, 1991, after an extensive public review process. The HB 567 Technical Implementation Workgroup developed to help write the HB 567 regulations has also been invited to participate in implementating the regulations.

CHALLENGE: Substantial work remains to fully implement the provisions of HB 567. This subject will be covered in more detail, later in this hearing. Your Committee's advice and actions to strengthen this program activity will be welcomed.

PROGRESS: There has been substantial activity by the State Emergency Response Commission (SERC) and progress in the formation of Local Emergency Planning Committees (LEPC). The SERC has decided to include hazardous substances in its program activities. The LEPCs are partners in the hazard analysis process. The completion of this will enable the State to begin the establishment of primary and secondary response depots.

CHALLENGE: Funding sources for the LEPCs is an important issue. Other states have adopted a variety of funding sources. The DEC believes that the State should work with the LEPCs in assuring an adequate source of funds for emergency response activities.

PROGRESS: The Department of Military and Veterans Affairs (DMVA) and DEC have signed a Memorandum of Agreement to better coordinate and integrate Disaster and Emergency Services programs. Part of DEC's Spill Prevention and Response (SPAR) staff is now co-located with DMVA's Division of Emergency Services (DES) to help meet this objective.

CHALLENGE: Substantial work must be done to better coordinate and integrate our State/local community response capability.

#### 6. IMPROVE WATER AND WASTE-WATER SYSTEMS THROUGHOUT THE STATE

PROGRESS: The coordinated action by the Legislature and the DEC and Departments of Community and Regional Affairs (DCRA) and Health and Social Services (HSS) in 1991 led to the approval of over 90 water, waste-water and solid waste disposal projects totaling over 48 million dollars. This was the largest combination of DEC Community Grant and Village Safe Water Projects in history. A listing of these projects is available.

CHALLENGE: The State's Sanitation problems, particularly in the rural communities, demands special emphasis. The DEC has formed a Federal/State/local community/private sector Task Force to develop a strategy for dealing with this problem. The program is titled: "A COMMITMENT TO ALASKANS TO SOLVE TODAY'S SANITATION PROBLEMS WHILE PLANNING FOR THE 21ST CENTURY", and will be described later in this hearing. The Public Health Service (PHS) and the DEC estimates it will cost over one billion dollars to bring our community water and waste disposal systems up to minimum health standards. Money alone cannot solve this problem. The Task Force wants to develop a partnership of Federal, State, local communities and the private sector to solve this problem.

PROGRESS: The DEC has also met with the Environmental Protection Agency (EPA) in a review of our water program initiatives. The EPA will participate in the Sanitation Task Force noted above, as well as in the multi-Department review of Water Management and Protection programs scheduled later this week. Our objective is to develop a partnership approach to comply with the programs mandated by the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA) and to retain primacy of these programs.

CHALLENGE: Implementation and compliance with the provisions of the CWA and SDWA will require funding on a time-table that is unrealistic. Other states and the EPA recognize this, and efforts are underway to amend the provisions of these Acts.

7. EMPHASIZE SOLID AND CONTAMINATED/HAZARDOUS WASTE MANAGEMENT.

PROGRESS: The DEC's Pollution Prevention initiative is emphasizing this objective. The DEC's Cooperative Agreement with the United States Defense Department agencies within the State also focuses on this objective. DEC, DNR, DOT and ADF&G are coordinating their efforts to evaluate potential sites.

The EPA also endorses our objective of locating hazardous waste treatment and disposal sites in Alaska, but the planning and review processes mandated by Federal and State laws will extend through 1993.

CHALLENGE: The job of inventorying contaminated sites continues. The cost of treating and disposing of contaminated and hazardous wastes can be expected to increase. Again, a partnership effort between the Federal, State, local governments and the private sector will be necessary to effectively deal with this challenge.

8. IMPROVE THE ADEC ENFORCEMENT AND COST-RECOVERY PROGRAMS

PROGRESS: The DEC is cooperating with other State and Federal agencies in strengthening the State's environmental enforcement programs. A former EPA enforcement attorney has been employed and assigned to the Anchorage District Attorney's office. Civil and criminal laws/regulations are being strengthened to discourage pollution, and improve our cost-recovery program.

CHALLENGE: Coordination with other State and Federal Agencies will strengthen our enforcement capability. Opportunities for improved coordination/integration with the Department of Public Safety and other agencies are being explored.

9. WORK WITH PRIVATE INDUSTRY IN SUPPORTING ENVIRONMENTALLY  
SOUND ECONOMIC DEVELOPMENT PROJECTS

PROGRESS: The Division of Governmental Coordination is working closely with all Departments of the State to assure a professional and coordinated review of economic development projects. This coordinated approach, in the early stages of project reviews, gives better assurance of incorporating effective, environmental protection requirements in project proposals and plans.

CHALLENGE: There are a number of redundancies and inconsistencies in regulations that are confusing and burdensome to those who must comply with such regulations. The EPA, Division of Governmental Coordination and other State agencies are reviewing these regulations to assure simplification, yet assure needed environmental protection practices.

10. BRING DECISION-MAKING RESPONSIBILITIES FOR ENVIRONMENTAL  
ISSUES BACK TO THE STATE WHEREVER POSSIBLE

PROGRESS: The President's revised Wetlands policy recognizes Alaska's unique situation, and provides a basis for greater State authority for Wetlands Protection and Management.

CHALLENGE: Cooperation with the Russian Commonwealth States and Canada will be essential to solving environmental problems that cross international borders. The Northern Forum provides a good framework for meeting this challenge.

11. ACHIEVE THE ABOVE PROGRAM OBJECTIVES WITHIN THE FRAMEWORK OF  
BUDGET AND PERSONNEL REDUCTION OBJECTIVES

PROGRESS: The various Cooperative Agreements and Partnerships formed this past year have resulted in improved performance and have eliminated the necessity for some cost/personnel increases that would otherwise have been required.

CHALLENGE: Increasing Federal laws and regulations; sometimes with unrealistic time-frame requirements are a challenge both to the State and to local communities.

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The above overview covers many of the primary DEC program activities. The DEC Division Directors are now prepared to cover their program activities in more detail.

Thank you, Mr. Chairman, for the opportunity to present this statement.

# STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

## DEPT. OF ENVIRONMENTAL CONSERVATION

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### 1991-1992 PROGRAM OBJECTIVES DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1. WORK COOPERATIVELY WITH COMMUNITIES, OTHER STATE/FEDERAL AGENCIES IN ADMINISTERING LAWS, REGULATIONS AND PROGRAMS WHICH PROTECT AND IMPROVE THE ENVIRONMENT. DEVELOP COST-EFFECTIVE PROGRAMS AND SOLUTIONS TO ENVIRONMENTAL PROBLEMS.
  - A. Continue development of Cooperative Community Agreements throughout the State. Involve Alaska Regional and Village Corporations in this program.
  - B. Work with the Department of Community & Regional Affairs & others in support of the Rural Development Initiative.
  - C. Work with the private sector to achieve environmental protection objectives.
  
2. PROTECT PUBLIC/ENVIRONMENTAL HEALTH; WORK CLOSELY WITH THE DEPARTMENTS OF HEALTH & SOCIAL SERVICES; COMMUNITY & REGIONAL AFFAIRS; PUBLIC HEALTH SERVICE; FOOD & DRUG ADMINISTRATION AND PRIVATE INDUSTRY TO ASSURE PROTECTION OF PUBLIC HEALTH.
  - A. Assure safe and quality controls in Meat & Poultry and Seafood Inspection Programs.
  - B. Improve compliance with environmental sanitation standards and use of pesticides.
  
3. EMPHASIZE POLLUTION PREVENTION IN ALL DEPARTMENT PROGRAMS, COMMUNITY AGREEMENTS AND IN INFORMATION-EDUCATION ACTIVITIES
  
4. COMPLETE CLEAN-UP OF THE EXXON-VALDEZ OIL SPILL; CONTINUE DAMAGE ASSESSMENT AND REMEDIATION WORK; SEEK FULL RECOVERY OF DAMAGES RESULTING FROM THIS OIL SPILL.
  
5. IMPROVE AND REFINE SPILL PREVENTION AND RESPONSE PLANS AND ACTION PROGRAMS; WORK COOPERATIVELY WITH ALL PUBLIC AND PRIVATE ORGANIZATIONS TO ACHIEVE THIS OBJECTIVE.
  - A. Co-locate and coordinate appropriate emergency services with the Div. of Emergency Services (DM&VA).
  - B. Support local community preparedness organizations.
  - C. Expand response efforts to include hazardous substances.

6. IMPROVE WATER AND WASTE-WATER SYSTEMS THROUGHOUT THE STATE
  - A. Protect Alaska's Groundwater Quality from contamination.
  - B. Retain primacy of the Safe Drinking Water Program; work with EPA and others in improving the laws & regulations.
  - C. Work with the Departments of Community & Regional Affairs and Health & Social Services in improving community facilities and operation-maintenance capability.
7. EMPHASIZE SOLID AND CONTAMINATED/HAZARDOUS WASTE MANAGEMENT
  - A. Emphasize prevention measures
  - B. Apply new and cost-effective technologies
  - C. Continue process of locating hazardous waste/treatment sites in Alaska; (including privately managed operations)
8. IMPROVE THE ADEC ENFORCEMENT AND COST-RECOVERY PROGRAMS
  - A. Strengthen information-education & service programs
  - B. Develop a fair & equitable process of enforcement/fines
  - C. Seek prompt and full-recovery from responsible parties
9. WORK WITH PRIVATE INDUSTRY IN SUPPORTING ENVIRONMENTALLY SOUND ECONOMIC DEVELOPMENT PROJECTS
  - A. Cooperate with the Depts. of Community & Regional Affairs & Commerce & Economic Development in these efforts.
  - B. Provide advice to encourage sound, economic development
10. BRING DECISION-MAKING RESPONSIBILITIES FOR ENVIRONMENTAL ISSUES BACK TO THE STATE WHEREVER POSSIBLE
  - A. Bring wetlands protection responsibilities to Alaska and local governments.
  - B. Work with federal agencies to encourage greater in-state management of federal programs
  - C. Exchange environmental management information with Canada, the Soviet Union and other countries to help improve our management/protection capability.
  - D. Work toward an environmental "level playing field" for competing industries in the northern regions.
11. ACHIEVE THE ABOVE PROGRAM OBJECTIVES WITHIN THE FRAMEWORK OF BUDGET AND PERSONNEL REDUCTIONS PLANNED FOR FY 1991-1992

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OPPORTUNITIES FOR IMPROVING INTER-DEPARTMENTAL COMMUNICATIONS, EFFECTIVENESS AND SERVICE TO THE PUBLIC

1. Continue inter-departmental communication and cooperation.
2. Explore additional opportunities for co-location of State facilities and offices; shared services.
3. Strengthen the Div. of Gov. Coord.; integrate and simplify regulations; speak with one voice.
4. In remote communities and villages, be on the lookout for pollution prevention problems; opportunities for cooperation

**COMPARISON OF REQUIREMENTS OF  
THE U.S. "CONSUMER SEAFOOD SAFETY ACT OF 1991" AND  
STATE OF ALASKA INSPECTION PROGRAM**

REQUIREMENTS OF PROPOSED ACT	PRESENT STATE PROGRAM	ACTION NEEDED TO UPGRADE
1. Administration of a comprehensive shellfish safety program in compliance with the National Shellfish Sanitation Program (NSSP) requirements.	Growers, harvesters, transporters or processors of bivalve shellfish must comply with the FDA administered National Shellfish Sanitation program. The State of Alaska shellfish program is currently certified by the FDA. Certified Alaskan operations are listed in the monthly Interstate Shellfish Shippers Listings.	No additional changes are needed in the certified program. Limited additional sampling is being done for the marine toxin, domoic acid. However, additional laboratory staffing/equipment is needed to conduct a comprehensive domoic acid sampling program, as well as, increase analysis of seafood products for contaminants such as PCBs, heavy metals, Listeria and Vibrio.
2. Develop health-based standards for safety and sanitation in handling and processing of fishery products (based on Hazard Analysis Critical Control Point (HACCP) at shore based facilities or on board processing vessels. Standards must be established for contaminants such as: bacteria, chemicals, parasites, and toxins. Processors must provide training for employees in sanitation and quality control. The state must have an inspector training program. Appropriate legal authorities must be available for the state inspection program. Plants must be registered with the regulatory agency.	The basic elements of the Alaska inspection plan are: a HACCP based plant inspection plan, plant registration, plan of operations (QA plan), enforcement and detention. Both shore based and and floating processors are routinely inspected based on public health risk. Contaminant levels exist for shellfish and marine toxins based on NSSP standards. Other existing federal standards are applied where appropriate (i.e. PCBs, pesticides, domoic acid, etc). Operations are inspected and training performed at the retail level to ensure that retail food store employees handle seafood products properly. Adequate legal authority is provided.	Processor's employee training program needs to be identified and evaluated for equivalency to a state training program. A formal state training program would need to be developed in coordination with processors and other appropriate agencies.  Enhance the existing retail inspection and employee training program to ensure that fisheries products are properly handled at the retail level.
3. If it is determined that no practicable alternative exists for ensuring the safety of fishery products, develop standards for handling, storage and transportation of fishery products on board fishing vessels and tenders.	ASMI has developed basic guidelines for handling fishery products on board vessels but no vessel inspection program currently exists.	A vessel inspection program, if adopted, could improve seafood quality by reducing product adulteration and encouraging better handling practices which will extend shelf-life. If a vessel inspection program were required for state certification, a program similar to the Canadian inspection program could be implemented.
4. Develop and administer a system to monitor fish growing areas and fishing grounds to identify areas where contaminated fish are likely to be caught and conduct research to determine relationship between polluted waters and seafood contamination.	Limited monitoring is presently being conducted for contaminants through product sampling. Intensive monitoring of shellfish growing/harvesting areas is conducted according to NSSP requirements.	Develop a formal product sampling program to evaluate possible product contamination. Work cooperatively with other agencies such as National Marine Fisheries (NMFS), Food and Drug (FDA), Alaska Sea Grant and other DEC program to identify locations where contaminations might occur and could pose a threat of contamination. Develop appropriate sampling.

(CONT)

**REQUIREMENTS OF PROPOSED ACT**

**PRESENT STATE PROGRAM**

**ACTION NEEDED TO UPGRADE**

5. Implementation of procedures and requirements to ensure safety of imported fisheries products.

Bivalve shellfish product imported into Alaska from domestic or foreign markets are monitored for bacterial contamination but no other state monitoring program is in place. DEC works closely with FDA to remove any potentially contaminated products from Alaskan markets.

Continue existing shellfish monitoring surveillance and coordination with FDA to identify contaminated products. Participate in product recalls and market audits.

6. Establishment of a surveillance system regarding health risks associated with human consumption of fishery products including commercial compared to noncommercial products, Alaskan vs. imported products, and contamination of products prior to vs. after sale to the consumer.

Foodborne illnesses which are specifically identified are investigated by the state epidemiologist. This office also maintains statistics on reportable human diseases botulism and PSP.

In cooperation with H&SS and other appropriate agencies develop a surveillance system to collect information regarding health risks associated with consumption of fishery products.

7. Develop public education and advisory program which provides: information and improves public awareness of state standards and promotes public understanding and acceptance of such standards and requirements; advice to recreational and subsistence harvesters regarding health hazards associated with fish they may harvest and precautions to safeguard themselves from harm; information to health professionals regarding persons at risk; that they may advise at risk individuals; health advisories concerning seafood safety.

No specific public education program exists but several state agencies provide information to the public regarding seafood safety. DEC issues public health alerts when health concerns such as elevated PSP toxin levels are identified.

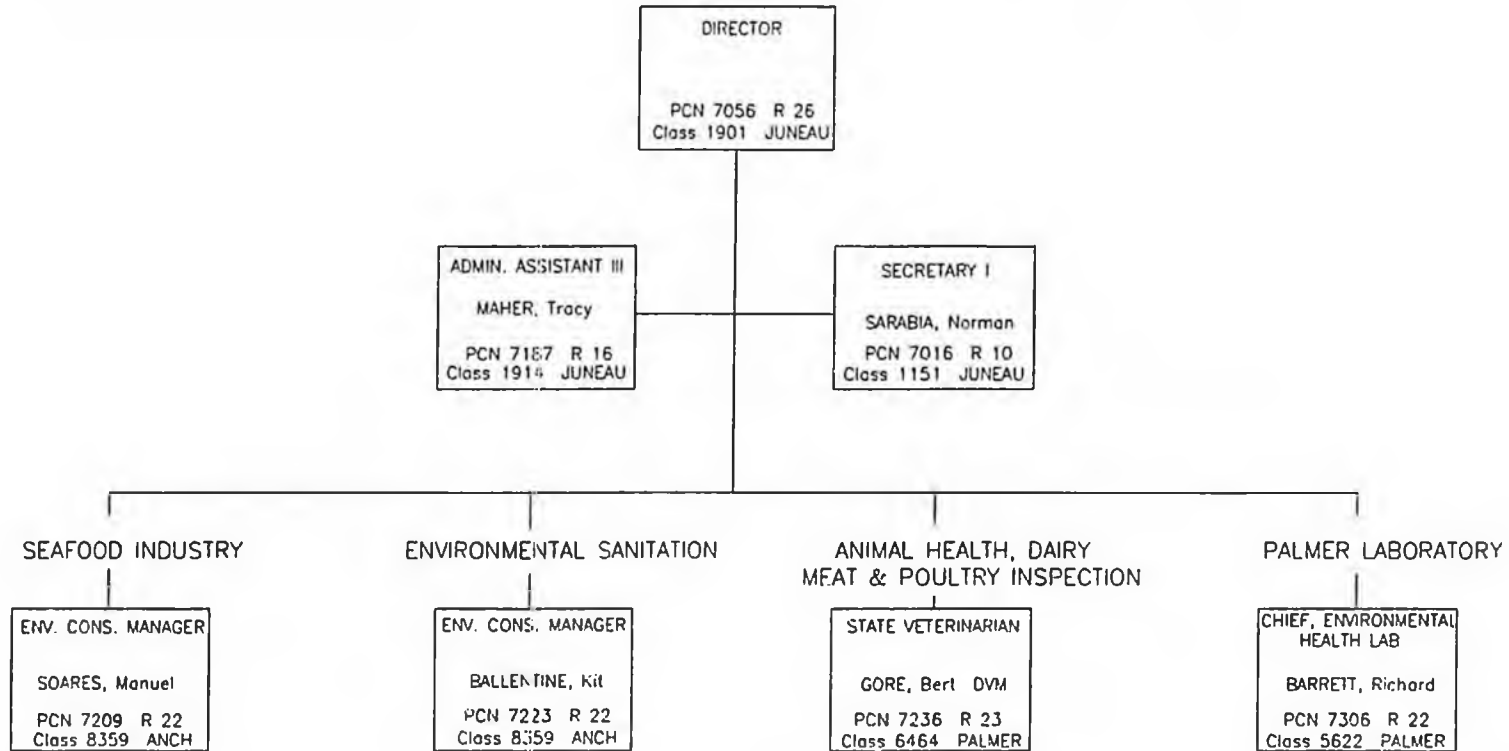
DEC will work with other state and federal agencies such as ASMI, Alaska Marine Advisory, H&SS, H&PS, etc to develop information regarding seafood safety. Explore establishment of a consumer 1-800 Hotline to provide information regarding seafood safety.

8. Design/implement seafood related research such as relationship of contaminated growing sites to human illness, improved sanitation and quality control, and development of methods for determining and detecting the presence of harmful contaminants in fishery products.

Various state and federal agencies are conducting research in these areas.

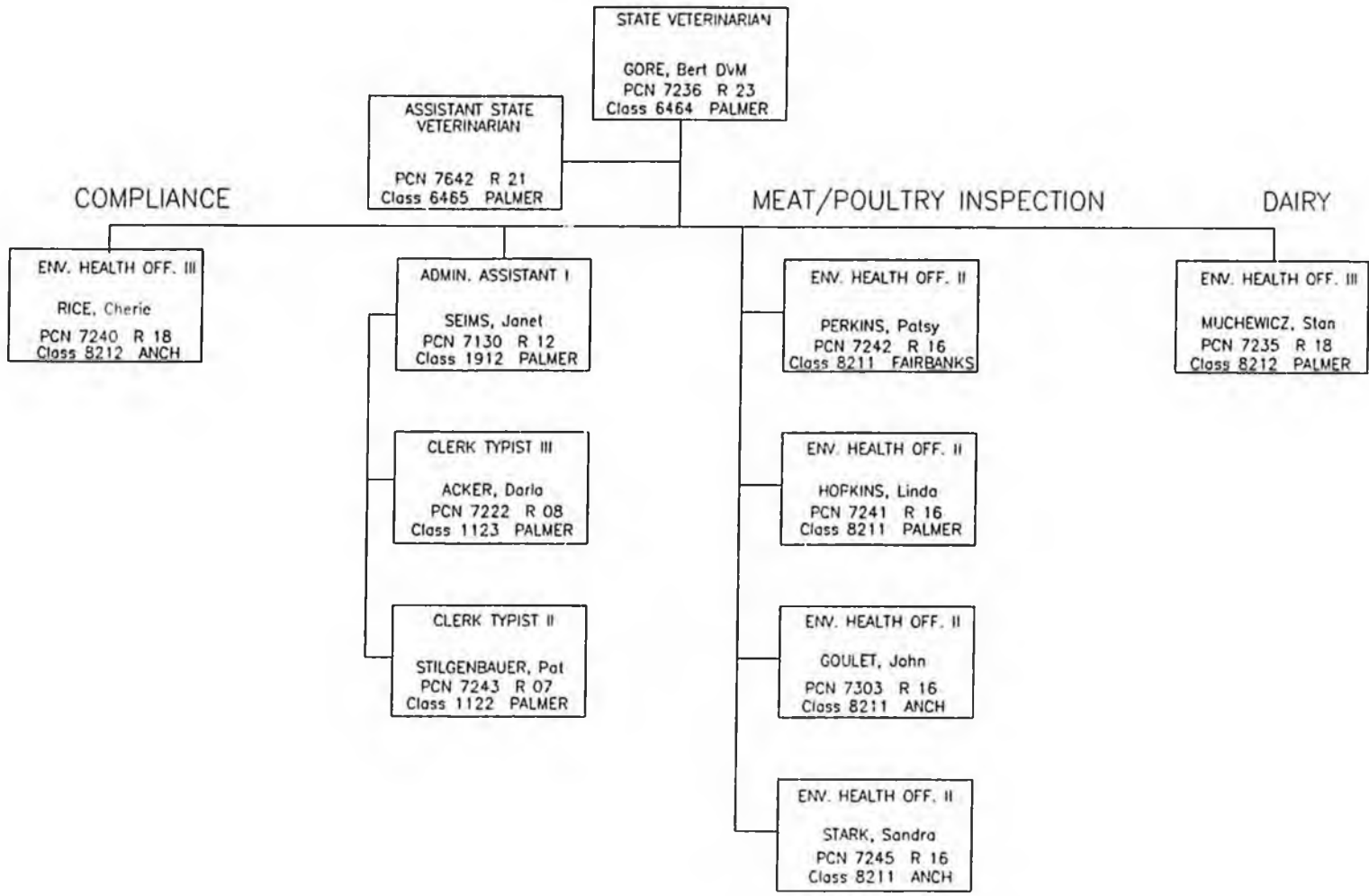
Inventory existing on going research and identify additional research needs. Work through Alaska Marine Advisory Program, H&PS, etc. to implement required research.

DIVISION OF ENVIRONMENTAL HEALTH  
DIRECTOR'S OFFICE



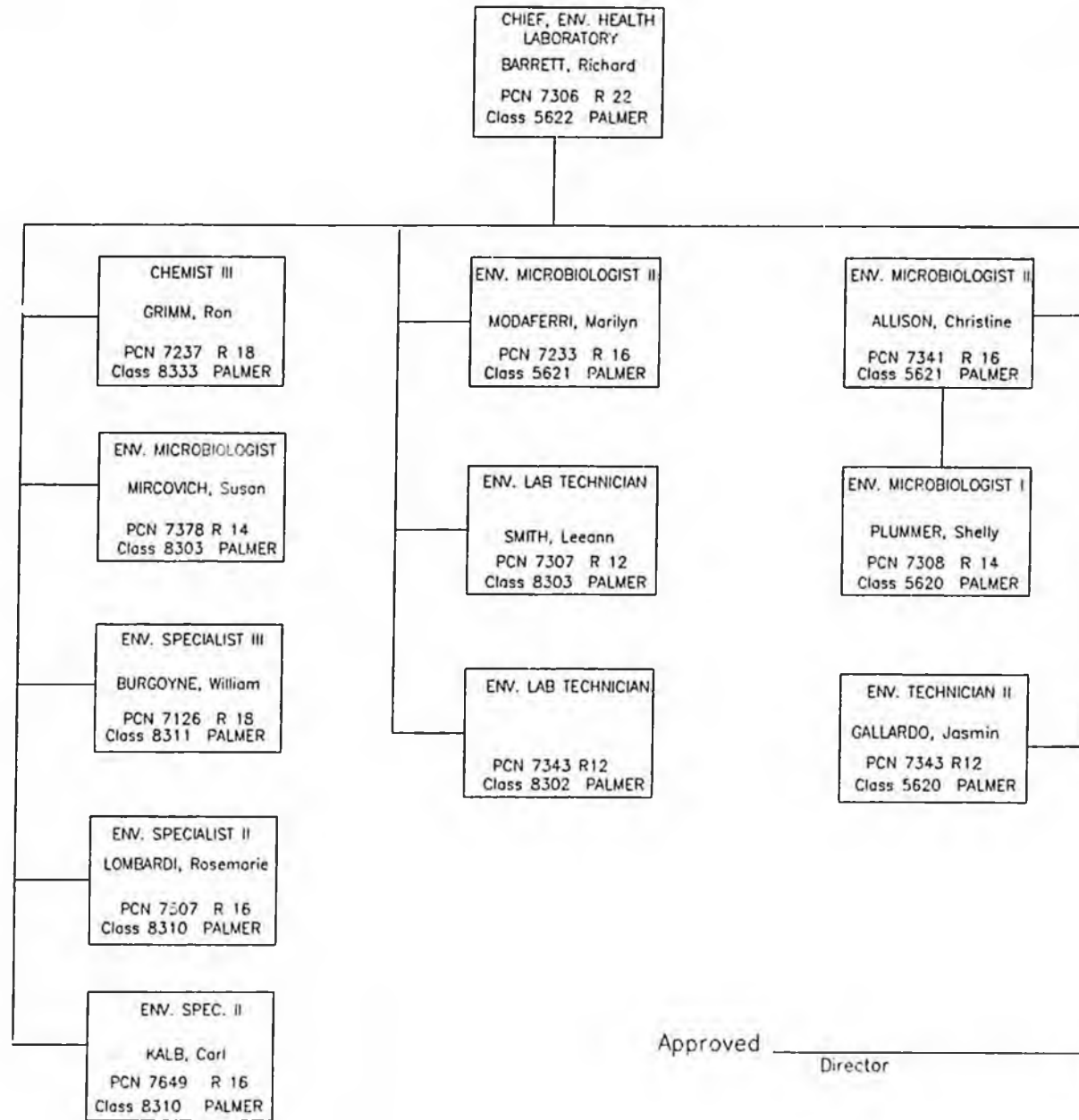
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Director

MEAT & POULTRY INSPECTIONS  
 ANIMAL HEALTH  
 DAIRY



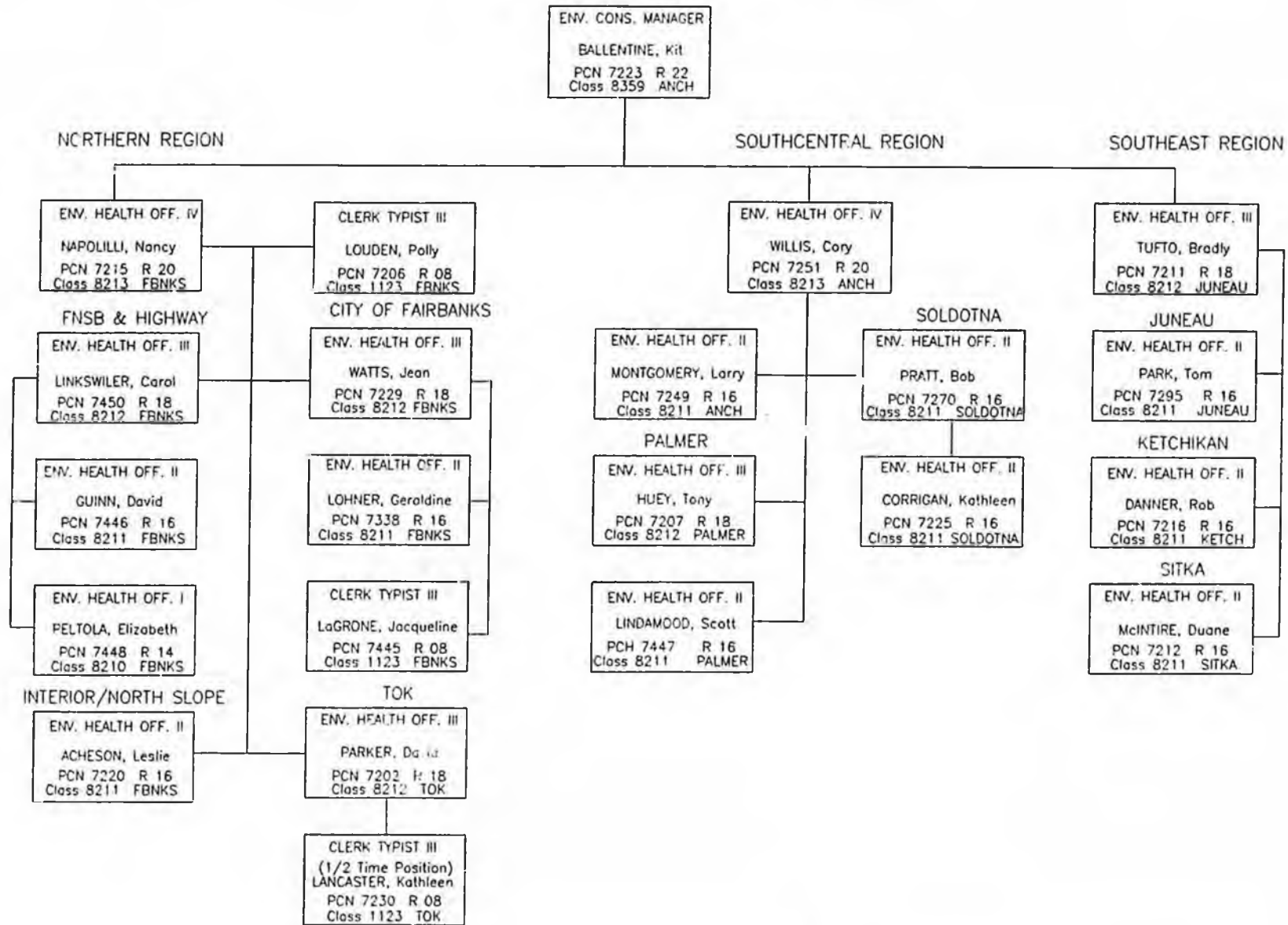
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# PALMER LABORATORY



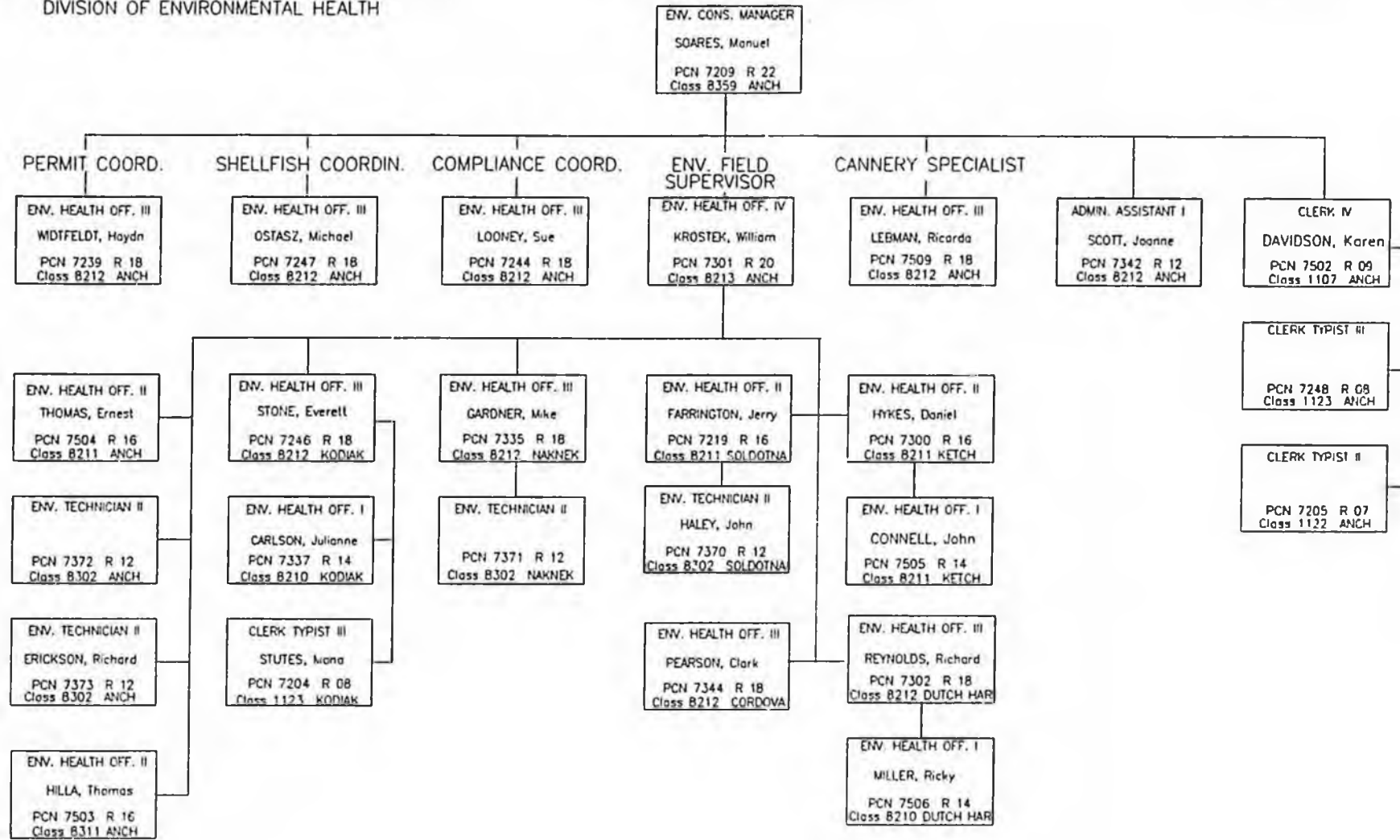
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Director

# ENVIRONMENTAL SANITATION



Approved \_\_\_\_\_ Director \_\_\_\_\_ Date \_\_\_\_\_

# SEAFOOD PROGRAM



Approved \_\_\_\_\_ Date \_\_\_\_\_  
Director

**Goal** To manage the proper and safe use of pesticides to prevent adverse effects on human health, wildlife and the environment in order to insure the integrity of the public health, prevent environmental contamination and comply with State Regulations and FIFRA.

### **Program Background**

Congress in 1976 passed the Toxic Substances Control Act (TSCA), which set up a premanufacturing review process that also regulates the manufacture, processing, distribution and use of all new chemicals. The act is designed to regulate the risks posed by the more than 65,000 existing chemicals and the thousands of new chemicals created yearly. Nationally, Americans use about 3 billion pounds of pesticides yearly. Improper use can cause the chemicals to pollute soil, kill vegetation and animals and contaminate the nation's and state's groundwater supplies. The Alaska Department of Environmental Conservation (DEC) since the mid 1970s has carried out Environmental Protection Agency (EPA) regulations on pesticides.

### **Issues**

The major issue is for the state to set up programs to train commercial applicators of the proper methods of pesticide and herbicide use. The chemicals are used by the Alaska Railroad and Alaska Department of Transportation and Public Facilities for vegetation control, while other forms of chemicals, biocides, are used extensively at Prudhoe Bay by the state's oil industry. The goals are to enforce regulations on the chemical use to protect the state's citizens, wildlife and environment. Since 1975 there has been only one pesticide-related fatality in Alaska, and few of a "serious" nature.

### **Major Features**

The Pesticide Program:

- Certifies roughly 1,825 pesticide applicators a year in proper use of the chemicals. DEC in FY 90 offered 33 training courses for chemical users where 341 people were involved. The state issues about 12 new permits each year and last year investigated 66 cases of alleged misuse of pesticides.
- Conducts about two dozen marketplace inspections yearly and several dealer inspections.
- Inspects food processing businesses, restaurants, service establishments and seafood processing plants for proper use of a range of chemicals, from pesticides to sanitizers.
- Provides technical assistance to applicators, answers public inquiries about pesticides, issues permits for aquatic applications, and monitors use to prevent injury and aerial contamination.
- Inspects greenhouses, research stations and mosquito and biting fly control programs.

### **Progress to Date**

The program so far has been successful in preventing any medical injuries as a result

of improper application-use of pesticides during the past four years.

### Activities in FY 93

#### ENFORCEMENT

- \* Conduct enforcement activities required to protect the public, workers, endangered species, habitats and groundwater sources.
- \* Fulfill all compliance monitoring activities required by the General Guidance and expand monitoring of commercial pest control operators and TBT anti-fouling paint dealers/applicators.
- \* Incorporate cancellation/suspension inspections in all compliance monitoring activities.
- \* Ensure the inspection program continues to educate private and commercial pesticide users in the proper use, storage and disposal of pesticide products and in pollution prevention.

#### GROUNDWATER, WORKER PROTECTION & ENDANGERED SPECIES

- \* Finalize the Worker Protection and Groundwater Implementation Strategies, reproduce EPA developed educational/training materials, and distribute those materials to the public and regulated community.
- \* Continue development of the necessary infrastructure among agencies and communities to develop and implement management plans for Groundwater, protection plans for Endangered Species And to promulgate the Worker Protection Standard.
- \* Initiate outreach/communication programs to notify both the agricultural community of the new Worker Protection Standards, and the public and responsible agencies of the Groundwater Protection Implementation Strategy.
- \* Develop generic and chemical specific Groundwater State Management Plans as required.
- \* Continue to monitor, assess and compile data on pesticides in groundwater.

#### PROGRAM BENEFITS

The state's pesticide program works to prevent environmental damage to vegetation, crops, wildlife or humans from the improper use of pesticides.

Fact Sheet: Division of Environmental Health  
Meat/Poultry/ Animal Health and Dairy Program

**Goal**

Protect human health by regulating the purity of meat and poultry and the sanitation of dairy products produced in Alaska.

**Program Background**

Before Statehood, the U.S. Department of Agriculture was responsible for programs that monitored the health of Alaska's livestock and poultry farms and inspected the purity of its dairy industry. Since, the Alaska Department of Environmental Conservation (DEC) was created in 1971 those programs have been assigned to the Department. The Legislature in spring 1990 also allocated funding to permit a reindeer meat inspection program to be conducted.

**Major Features**

The major features of the program include:

**Animal Health**

- Monitors the import and export of domestic animals and controls animal-to-animal diseases.
- Provides for quarantines and/ or compliance with laws calling for disposal of diseased livestock.

**Dairy Sanitation**

- Oversees the producers and processors of milk and frozen desserts, inspects the sanitation conditions and equipment at the state's dairy farms and its milk processing plant.
- Samples to ensure the wholesomeness of Alaska milk products.

**Meat and Poultry**

- Inspects all state slaughter houses and processors to make sure they meet state and federal sanitation standards in the processing of meat and chicken and samples for wholesomeness.

**Activities in FY 93**

During FY 1993 the program will:

- Adopt import and change of ownership regulations for pseudorabies in swine
- Maintain a state "Equal to Federal Inspection" program to enable state-inspected meat products to enter wholesale commerce.
- Regulate interstate shipment of reindeer for farming purposes
- Bring two additional reindeer slaughter facilities under inspection in Nome and White Mountain and increase inspections at Bering Sea Reindeer Products in Mekoryuk

### **Program Benefits**

The program protects public health and an Alaskan industry by assuring the wholesomeness of Alaskan-raised meat, poultry and dairy products. It also assures the health of imported and exported farm animals and horses -- an important factor in their sale.

## Fact Sheet: Division of Environmental Health, Laboratory

### Goal

Protect public health and support all DEC Environmental Health Division programs by performing scientifically complex tests to check for a wide range of illness or forms of environmental contamination.

### Program Background

When the Department of Environmental Conservation (DEC) was created in 1971, meat and dairy inspections were handled by a laboratory run since 1965 by the state Division of Agriculture. That lab continued to support DEC programs for the first 10 years of the Department's life. In 1981, however, the state took over operation of the laboratories, the Palmer facility specializing in microbiological tests, with another Department lab in Douglas concentrating on chemical analysis.

### Issues

The Palmer lab is involved in most every major health issue that affects the public's health and safety in Alaska. It performs chemical-biological tests on all meat raised in the state, on state dairy products, all state fish and shellfish stocks and even on Alaskans' pets. It performs a host of chemical checks on questionable samples, searches for the cause of outbreaks of illness, monitors the quality of water testing labs and deals with diverse health issues from human illness to brucellosis in cattle.

### Major Features

The major features of the Laboratory Monitoring Operating Program include:

- For Seafood: It conducts basic inspections, plus routine random chemical, bacteria and microbiological tests on all finfish in the state. For bi-valve shellfish, like clams and oysters, it conducts microbiological tests and checks for the presence of the toxin PSP that causes **Paralytic Shellfish Poisoning**. For crab and shrimp the lab also conducts organic testing programs. The lab also tests for **parasites**.
- For animals: It conducts a wide range of routine testing programs, many needed for breeders to receive international health certificates for sale or shipment of animals from Alaska. For cattle it tests for brucellosis, while it tests for EIA (Equine Infectious Anemia) in horses, especially those intended for interstate sale. It also tests pets, especially dogs, intended for shipment from the state. The program also tests for mastitis, TB and other illnesses.
- For dairy animals: It screens for milk quality,

microbiologically and chemically.

- For water, it tests the performance of 25 private laboratories that screen water for microbiology and bacteria problems.
- The lab also tests everything from animal feed to fertilizer and pesticides, not counting a wide range of microbiological, serological and chemical tests on samples submitted by the public.

#### **Progress to Date**

The program, which has a staff of three microbiologists, two environmental technicians, one chemist and the laboratory director, in FY 1990 is conducting multiple tests on 15,000 samples, including some 5,000 seafood samples, 3,700 resulting from potential contamination caused by the Exxon Valdez oil spill. The lab conducted 6,231 animal tests in FY 1989, tested 126 animals bound for export from the country, conducted 922 seafood processor inspections, tested 1,744 seafood samples for PSP, conducted 1,619 water samples, and handled 173 consumer complaint tests.

#### **Activities in FY 91**

In Fiscal Year 91 the lab will continue its regular sampling program. It also:

- Develop and implement a domoic acid sampling program for shellfish and other seafood products.
- Will complete development of a sampling program for listeria, a type of bacteria that is beginning to appear in Alaska seafood stocks. The bacteria is somewhat similar to salmonella in its effect.
- Initiate sampling program for heavy metals, PCB and Listeria in seafood products.
- Continues certification of drinking water testing labs.

#### **Program Benefits**

The laboratory testing program is essential if the other program elements of the Environmental Health section are to carry out their missions to protect the public from illness and health problems.

###

## **DIVISION OF ENVIRONMENTAL HEALTH ENVIRONMENTAL SANITATION**

### **Goal**

To ensure that public facilities maintain sanitary conditions that will protect the health and safety of Alaska residents and visitors.

### **Issues**

Major sanitation issues abound in Alaska. Examples range from the cases of 29 health aides who developed gastrointestinal illness while attending a retreat, and the eight individuals who contracted Hepatitis A traced to a child-care center, to the 32 Alaskans who got sick after eating pesticide-contaminated watermelon.

The state's environmental sanitation program is responsible for maintaining and enforcing necessary standards of cleanliness and sanitation during the construction, operation and maintenance of public facilities. Prevention, which is the likely key to achieving the mandate, requires not only a strong inspection / enforcement program, but also a strong education program.

### **Major Features**

The Environmental Sanitation Program:

- Inspects over 6,000 facilities statewide: 10 types of public facilities, each with different statutory and regulatory requirements: permanent and temporary food service facilities and bars, food stores and markets, warehouses and food processors, schools, public accommodations, pools and spas, barbershops/beauty shops/tattoo parlors/day care/preschool/child and adult residential care centers, and compressed air providers.
- Monitors and enforces the Smoking in Public Places Law and Vehicle Law.
- Carries out program goals by education, voluntary compliance and enforcement. Provides in-depth technical assistance in the design, operation and maintenance of pools and spas, school safety, indoor air quality, food service operations and epidemiological investigations.
- Is staffed by 19 Environmental Health Officers, who conduct plan reviews and facility inspections, issue permits and approvals, investigate complaints regarding public facilities and foodborne-waterborne illness, and respond to disasters and product recalls.
- Issues field directives, policies and guidelines, and provides training to assist public facilities operators.
- Works closely with other agencies in providing inspection information, investigative support and interagency coordination.
- Publishes local monthly food service inspection scores.

### **Progress to Date**

During the past year, the section conducted 5,000 public facility inspections, investigated more than 500 complaints, issued more than 1,200 permits and certifications, reviewed more than 300 facility plans and applications, provided 3,000 instances of technical assistance and 90 training sessions, and conducted four product recalls.

In addition, the program staff:

- Developed drinking water education curriculum for elementary and secondary levels and facilitated its use in schools in the village of Noatak.
- Revised regulations to:
  - Incorporate food processing in food service regulations and create sections on bottled water and vacuum packaged foods.
  - \* Address contemporary issues such as sifting agents, bulk food sales, manager certification, bed and breakfast operations and bulk food sales.
  - \* Clarify requirements for recreational vehicles.
  - \* Develop noise standards in schools and identified specific safety hazards in schools, preschools and child care facilities.
- Provided nationally recognized operator training for pool and spa operators throughout the state.
- Installed over 1,500 radon detectors in schools and child care facilities throughout the state.
- Developed a series of five informational brochures regarding insect and rodent control and safe storage of toxics and chemicals for distribution to facility operators and the public.

#### **Activities for FY 93**

- Develop and implement Food Service Certification & Recognition Program.
- Incorporate more pollution prevention activities during routine inspections and village visits.
- Enhance Health & Safety Education program through the scheduled publishing of day care and school news letters, and participation on sanitation task force.
- Increase inspectional and educational activities of retail stores handling seafood.

#### **Program Benefits**

The ultimate benefit of the Environmental Sanitation Program is that an acceptable level of basic sanitation is maintained in public facilities, through surveillance, education and prevention, to protect the health of both Alaskans and visitors and to prevent the occurrence of major disease outbreaks associated with the use of public facilities.

## **DIVISION OF ENVIRONMENTAL HEALTH SEAFOOD INSPECTION SECTION**

### **Goal**

To guarantee the wholesomeness and safety of all Alaska seafood caught for commercial sale, in order to protect the reputation and thus marketability of the state's seafood for the benefit of the nearly 35,000 people who make their livings from the sea.

### **Program Background**

While the state has had a seafood inspection program since the 1970's, it was expanded in spring 1982 after a Belgian man died of botulism from eating a single tainted can of salmon processed in Alaska in 1981. Since 1982 the program has been upgraded, standardized and expanded. It now employs 15 inspectors to monitor about 600 floating and shore-based seafood processing plants.

### **Issues**

With Alaska fishermen and women now harvesting more than a billion pounds of seafood a year, the main issue is ensuring the proper care of the seafood after harvest, its transport, and especially its processing - often into value-added products. The goal is to guarantee the fish remain free of any chemical or biological contamination. The program concentrates on inspections of salmon canneries and firms that smoke salmon and vacuum-pack it into pouches - processes which if performed incorrectly are capable of producing unsafe product - and the processing of some types of shellfish: notably oysters, mussels and razor clams, which are subject to contamination by Paralytic Shellfish Poisoning (PSP).

### **Major Features**

The major features of the Alaska Seafood Inspection Program include:

- Review of all construction and facility plans to check for design problems that could result in sanitation-processing lapses.
- Issuance of permits that require processors to follow state seafood regulations, and in the case of canneries and other value-added processors, to follow specific approved plans of operation.
- inspections of fish tenders and processing plants to insure that proper procedures are followed and training received.
- Use of enforcement actions, from warnings to issuance of notices of violation in the case of more serious problems. The program also can detain contaminated or adulterated seafood. These are all steps to ensure that only healthy seafood reaches market.

## **Progress to Date**

Since 1982 the program has become far more sophisticated. Improvements include:

- Expanded microbiological testing of seafood products.
- Focusing the program, concentrating inspection efforts on facilities with the higher health risks or those with lower previous inspection scores.
- Standardizing the inspection process, with written directives, policies, and guidelines for processors.
- More emphasis on upgrading handling procedure, ie., requiring that fish be iced before processing and kept free of petroleum-based contamination.
- Development of a scored inspection checklist based on relative health risks.
- New regulations that are easier to use, establishment of a special section for direct market fishing vessels, and consolidation of requirements.
- Creation of an advisory committee made up of the FDA, National Fish Processing Association and others to oversee creation of new regulations and procedures.
- Following the March 24, 1989, Prince William Sound oil spill, creation of a special inspection program that inspected processing plants several times daily to prevent the harvest of any oil-contaminated fish, and conducted inspections of potentially contaminated boats.
- During 1989 detained more than 490,000 pounds of decomposed salmon, another nearly 300,000 pounds of adulterated salmon potentially contaminated by the results of the oil spill, plus thousands of pounds of halibut, herring, oysters and crab. The efforts protected the consumer and ensured the reputation of Alaska's seafood.

## **Activities in FY 93**

Upcoming activities include:

- Initiate domoic acid sampling program for shellfish and dungeness crab.
- Initiate PCB sampling program of all Alaska fin fish.
- Continue detailed inspection program, which may help open more areas for fishing.
- Training inspectors to standardize inspections statewide.

## **Program Costs**

The cost for the seafood program in FY 92 is about \$1.7 million.

## **Program Benefits**

Since 1982 there have been no incidents where contaminated fish have reached market and no cases of botulism reported from Alaska seafood. The program has guaranteed the wholesomeness and safety of seafood stocks and helped increase the market for Alaska seafood, helped Alaska stocks compete against foreign, pen-reared salmon, and helped to promote satisfactory prices for the catch.

## SPAR MISSION

The Spill Prevention and Response (SPAR) Division of the Alaska Department of Environmental Conservation is responsible for preventing incidents involving the spill or release of oil and hazardous substances. In the event of spills or releases, SPAR will be prepared to minimize the impact upon lives, property, and environment by responding decisively to secure, contain, and remove such discharges in accordance with the National Contingency Plan and the State Master Plan. Further, locations contaminated by hazardous materials will be detected and aggressive clean up action taken according to priority ranking of sites. Included in SPAR's mission is coordination of planning and response activities with Federal and State agencies, local governments, and local responders.

## SPAR VISION

The Spill Prevention and Response programs protect Alaskan citizens, public health, and the environment in a service-minded manner. The women and men effectively manage the resources entrusted to them by the public through creative and innovative problem-solving, cost-effective planning and operations, and fair and reasonable applications of laws and regulations. Through a spirit of cooperation, SPAR is responsive to the needs of the public, other government agencies, and fellow workers.

## DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### Division of Spill Prevention and Response

#### FY 92 Program Objectives

##### Spill Response

Improve the State's capability to respond to oil and hazardous substances pollution incidents, particularly those of a catastrophic or significant nature, in coordination and cooperation with the Federal On Scene Coordinator. Work with other State agencies, especially the Division of Emergency Services, to improve staffing of the State's Incident Command System. Develop an inventory of pollution response equipment throughout the State, country, and world. Develop a database for responders, including volunteers and regional hazardous materials response teams. Promulgate operations manuals for spill responders. Improve electronic communications capability throughout the State for spill response. Integrate spill planning with response readiness through planning and participation in meaningful exercises and drills. Acquire response action contractors for emergency spill response.

##### Safety and Training

Ensure that all responders to oil spills and releases of hazardous substances have the skills and knowledge required to perform their duties in a safe and professional manner. Develop individual training records and an annual training plan and identify training opportunities in Alaska. Re-establish the medical monitoring program for ADEC employees who may normally respond to spills and releases.

##### Oil and Hazardous Substances Release Response Fund

Promulgate policy and procedures to improve management of the Oil and Hazardous Substance Release Response Fund. Document areas where Fund management can be improved with policy guidance and direction from the Commissioner. Ensure that expenditures from the Fund are appropriate and it is managed according to State law.

##### Contingency Plans

Prevent adverse impacts to public health and the environment by ensuring the development of sound requirements to implement recent legislation; adequate industry oil spill response planning and preparation through review of facility and vessel contingency plans and verification of response capability by drills and inspections. Evaluate the need to require other transportation modes to submit contingency plans for transporting oil and hazardous substances.

### Spill Prevention

Reduce the size and number of oil spills in Alaska by promulgating effective requirements; providing technical assistance and public education; participating in specific risk reduction efforts; and verifying industry compliance with prevention requirements.

### Financial Responsibility

Ensure that oil handlers in Alaska have adequate financial resources to conduct spill response actions to a major discharge of oil by developing requirements that allow multiple mechanisms for demonstrating proof of financial responsibility and reviewing and approving financial responsibility documentation.

### Response Planning

Ensure a coordinated and effective state agency response to all significant oil and hazardous substance discharges by developing a state spill response plan; testing the adequacy of the plan through spills and spill exercises; and routinely revising the plan to incorporate lessons learned.

### Local Emergency Response Planning

Ensure preparedness for oil and hazardous substance spill response at the local level by providing funding and technical assistance for the establishment of Local Emergency Planning Committees, completion of local "hazards analyses", and development and implementation of local spill response plans.

### Spill Response and Cleanup Technology

Investigate uses of new technologies through the Hazardous Substance Spill Technology Review Council, developing testing protocols and using spills of opportunity to apply new technologies. Participate in research, development, testing, and evaluation activities with the Prince William Sound Science Center, University of Alaska, and other states and federal agency R & D organizations.

### Contaminated Sites

Implement a contaminated site management system which discovers, lists, ranks, assesses, cleans up and closes out sites in a systematic process. Maintain an automated database to inventory and rank sites, recording assessment and clean up actions. Reduce the inventory of sites by obtaining federal and State funding and working with State agencies, local governments, and private parties in overseeing clean up and restoration of their sites.

### Underground Storage Tanks

Provide financial assistance to underground storage tank (UST) owners so they can upgrade their UST systems and clean their sites to a point where they may be insured by the private sector and remain in business as an integral part of our economy.

### Federal Contaminated Sites

Work with the Department of Defense in overseeing the assessment and cleanup of contaminated sites at thirty military facilities in the State. Negotiate cooperative agreements between DEC, EPA, DOD, and U.S. DOT regarding cleanup of contaminated sites at major facilities of Eielson AFB, Elmendorf AFB, Fort Wainwright, and Standard Steel Salvage Yard.

### CERCLA

Participate in the CERCLA process with EPA to ensure that federal superfund dollars are spent judiciously to assess and cleanup contaminated sites which pose the greatest threat to human health and the environment.

### Administration and Management

Develop a Division Organization Manual which describes the Spill Prevention and Response Program listing the mission of SPAR, program descriptions, organization, staffing. Involve staff in fiscal management, personnel administration, project management, and time management. Look for ways to meet the Administration's goals of downsizing by conducting a workload analysis, streamlining processes, delegating authority to the lowest level practical giving staff responsibility and accountability, consolidating similar activities, and re-structuring the Division's organization to perform more efficiently.

### EXXON VALDEZ Spill Office Transition

Continue efforts to conclude the operations of the EXXON VALDEZ Spill Office, supporting remediation, restoration, and cost-recovery activities. Eventually transferring appropriate responsibilities to the Regional Administrator and Contaminated Sites Section. Assist in finding State employment opportunities for employees of this Staff.

### Public Information

To raise public awareness about the threats posed by the storage and transportation of oil and hazardous substances in their communities by establishing and advertising computer access to all information from facilities required to report the types and locations hazardous substances in storage or use. Inform the public in a timely, honest, and thorough manner of spill response activities in coordination with the Federal On Scene Coordinator. Look for opportunities to inform the public of other significant activities under Division purview that affect them.

## SPILL PREVENTION AND RESPONSE DIVISION

### - OVERVIEW -

#### Introduction

The Division of Spill Prevention and Response (SPAR) was established in July 1991, and is responsible for protecting the quality of Alaska's land, waters, and air from oil and hazardous substance spills. The Division strives to implement this mandate in a way that provides a stable and credible regime for the regulated community while enhancing the health and general welfare of the people of the State.

The Division is responsible for preventing incidents involving the spill or release of oil and hazardous substances. In the event of spills or releases, SPAR will be prepared to minimize the impact upon lives, property, and environment by responding decisively to secure, contain, and remove such discharges in accordance with the National Contingency Plan and the State Master Plan. Locations contaminated by hazardous materials will be detected and aggressive clean up action taken according to priority ranking of sites.

The division establishes regulations to protect public health and resources; issues authorizations such as plan approval or certificates in accordance with regulations; and monitors and maintains compliance with environmental standards. The Division also provides assistance and guidance to industry and the public on spill response matters, and serves as the designated State recipient of federal environmental quality financial assistance.

The Division includes three sections to carry out its mandate: including Spill Prevention, Planning and Management, the Spill Response Office, Contaminated Sites cleanup/Storage Tank Assistance (enclosure I).

#### Director's Office

The Spill Prevention and Response Director's Office provides overall management and administrative functions of the new Division. Activities include program development and supervision; budget and work plan development; regulation development oversight; regional work plan review; and overall program responsibility for the Division. The Director is the Commissioner's designated Oil and hazardous Substance Release Response Fund manager.

#### Spill Prevention, Planning and Management Section

This section manages three projects (1) Oil Pollution Control, (2) State Emergency response Commission, and (3) State and Regional Contingency Planning (enclosure II).

### Oil Pollution Control:

The Oil Pollution Control Project reduces the potential for oil and hazardous substance spills through design, development, planning coordination, implementation and administration of Statewide programs for facility and vessel contingency plans, inspections, discharge exercises, prevention, financial responsibility and subcatastrophic spill response. Major activities include development of policy, legislation, regulations, and workplans; coordination and implementation of program objectives through four regional offices; tracking and reporting on the status and progress of all spill incidents; preparation of technical analyses and reports; development and management of agreements and contracts for spill response and special projects; technical assistance to the public and regulated community; and initiation of enforcement action as appropriate for approximately 400 operators required to submit proof of financial ability to respond to spills.

### State Emergency Response Commission:

The State Emergency Response Commission (SERC) is composed of nine State agency commissioners and seven public members. This project provides the staff support to the SERC for implementation of local emergency planning and community right-to-know programs as mandated by state and federal laws. The SERC assists the State and local governments with the development of oil and hazardous substance spill contingency planning by conducting training workshops and providing information to local communities.

### State and Regional Contingency Planning:

The State and Regional Contingency Planning project develops and annually revises Statewide and regional plans to coordinate State and other parties involved in response to hazardous substance incidents including oil spills. Regional plans provide detailed information regarding spill hazards, risk to humans and the environment, and response capability.

### Spill Response Office

The Oil and Hazardous Substance Spill Response Office (enclosure III) is a highly trained group responsible for immediate response to catastrophic spills or declared emergency discharges of oil or hazardous substance anywhere in Alaska. Staff prepare all State responders for such events by improving the State's overall oil and hazardous substance spill response capabilities through education, training on response techniques, equipping responders, addressing life, health, safety issues prior to an incident.

### Oil and Hazardous Substance Technology Review Council:

The Spill Response Office also provides staff assistance to the Oil and Hazardous Substance Technology Review Council which is composed of the commissioner of DEC, the adjutant general of the Department of Military and Veterans Affairs, a representative from the University of Alaska, the Governor's senior science advisor, a

representative of the Prince William Sound Science Center, and four public members appointed by the Governor. The Council assists in the identification of containment and cleanup products and procedures for arctic and sub-arctic hazardous substance releases. The council reviews oil and hazardous substance spill cleanup technology research and development activities undertaken by other government agencies and industry spill response groups. The council also makes recommendations to the Department and agencies of the state regarding the use and deployment of these products and procedures.

### **Contaminated Sites Section**

This section manages the State contaminated sites project, Leaking Underground Storage Tank and Underground Storage Tank (LUST/UST) projects, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) project, Department of Defense Federal Facilities cleanup and Storage Tank Assistance program (enclosure IV).

#### **State Contaminated Sites:**

The State contaminated Sites project systematically identifies, lists, ranks and selects contaminated sites throughout Alaska for assessment and cleanup on a priority basis.

#### **LUST/UST:**

The federally funded Leaking Underground Storage Tank (LUST) project is responsible for overseeing corrective action at sites where a release has occurred from a commercial underground storage tank. The federally funded Underground Storage Tank (UST) program provides technical assistance and courtesy inspections to tank owners and provides staff support for State program approval to the Environmental Protection Agency.

#### **CERCLA:**

CERCLA, is a federal statute requiring all hazardous sites be inventoried and investigated. The State's program is composed of 2 cooperative agreements (CA), called Multisite and Core respectively. The Multisite CA provides federal funds (no match) for the State to conduct field investigations and score sites under the CERCLA Hazardous Ranking System. The Core Program CA provides federal funds for State CERCLA program development including supervision, management, cooperative agreement administration, contracts, procurement, training, and legal assistance.

#### **Federal Facilities Cleanup:**

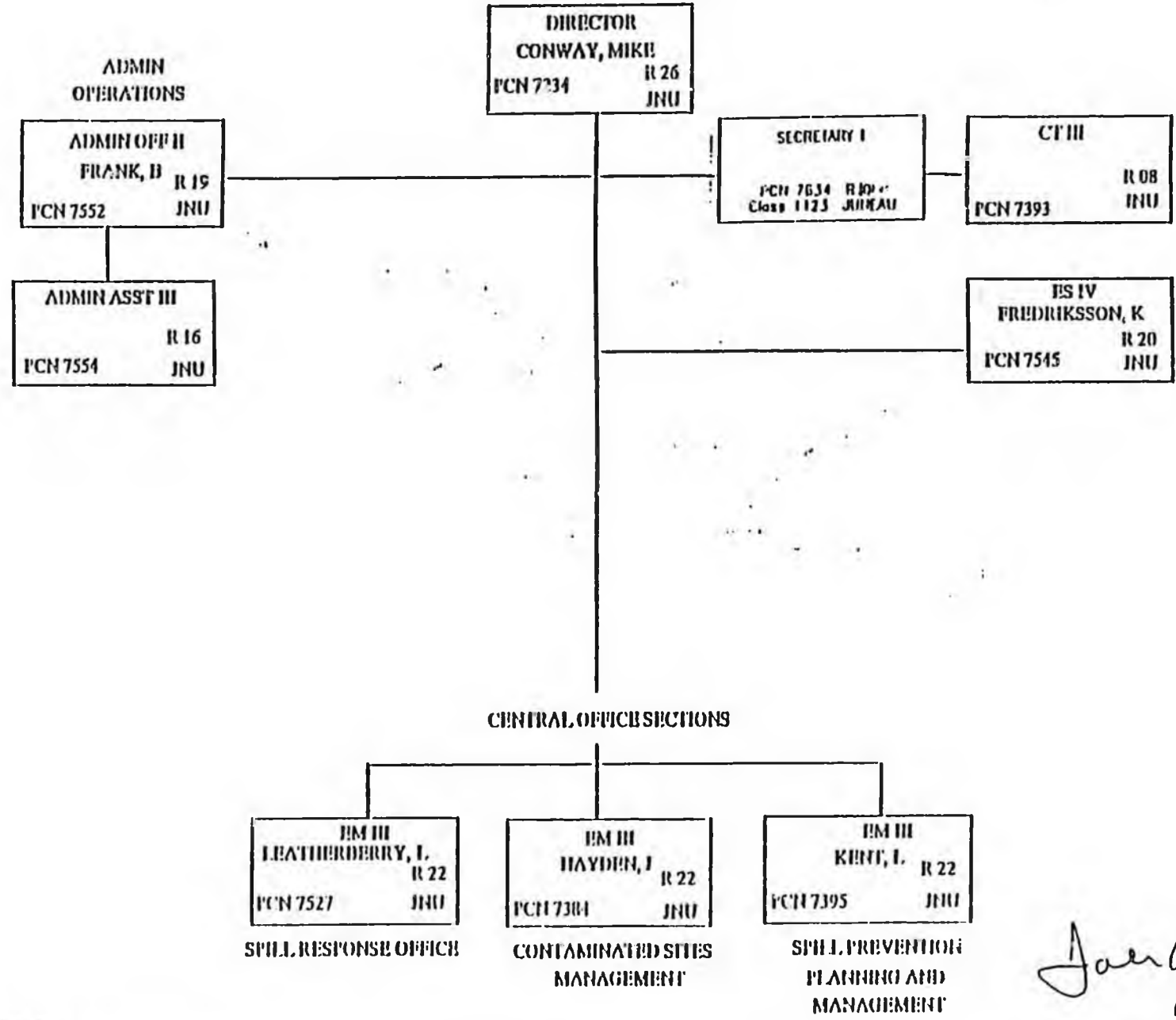
The Department of Defense (DOD) federal facilities program negotiates cleanup compliance orders and oversees the multi-million dollar cleanup of contaminated sites on federal facilities. Federal funds are received from DOD for State participation and oversight of federal facility cleanups.

### Storage Tank Assistance:

The Storage Tank Assistance project protects the public from contamination resulting from leaking underground storage tanks through a newly created regulatory and assistance program which includes prevention, education and cleanup. With guidance from the Board of Storage Tank Assistance, State financial assistance is provided for conducting site assessments and testing tanks for leaks, cleanup from leaking tanks, and upgrading or removing tanks. Regulations govern certification of tank workers and site assessors. Installation, registration, maintenance, leak detection, site assessment, upgrade, cleanup and closure of tanks and tanks systems is also governed by regulations under this project.

Enclosure I

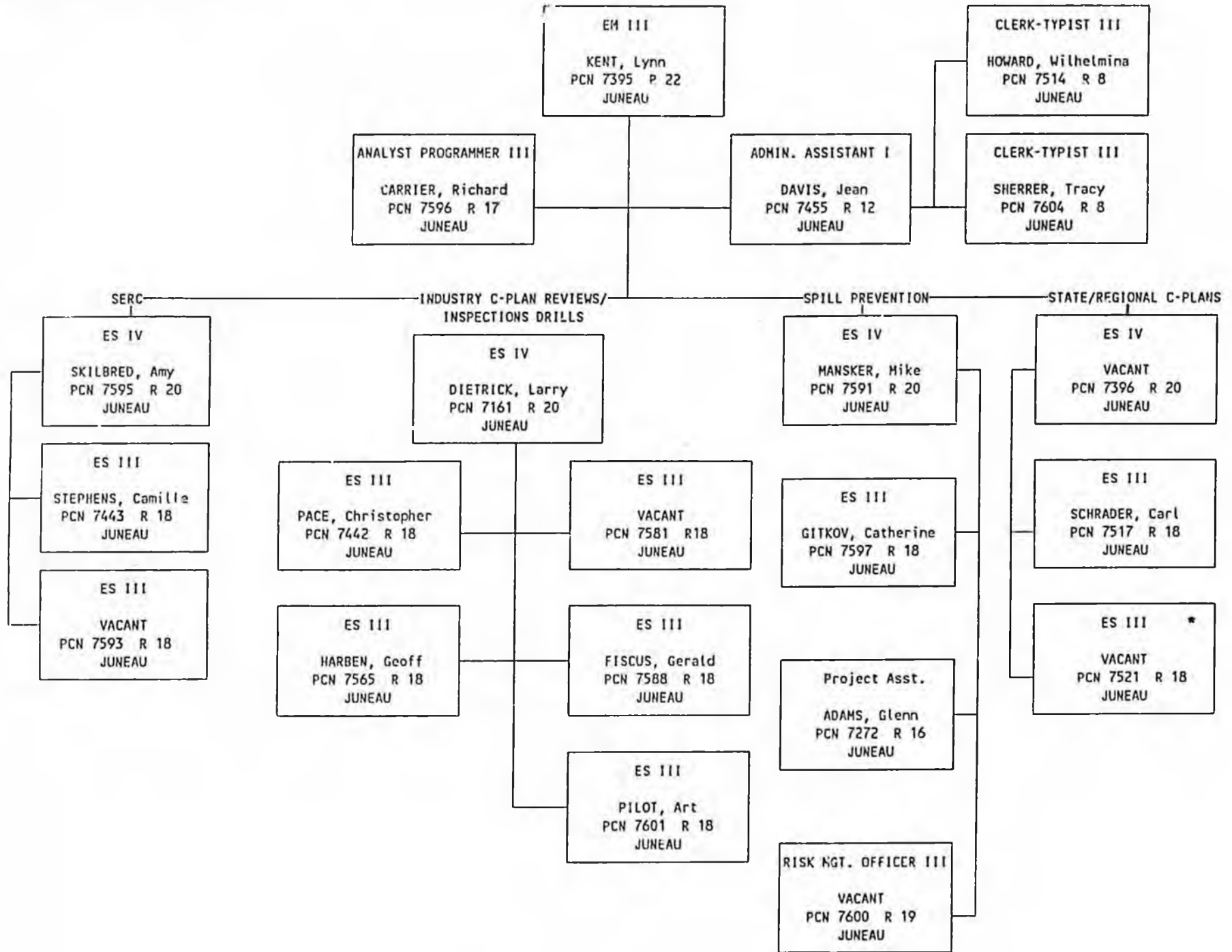
STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION AND RESPONSE  
DIRECTOR'S OFFICE



*Jane Lander*  
6/28/91

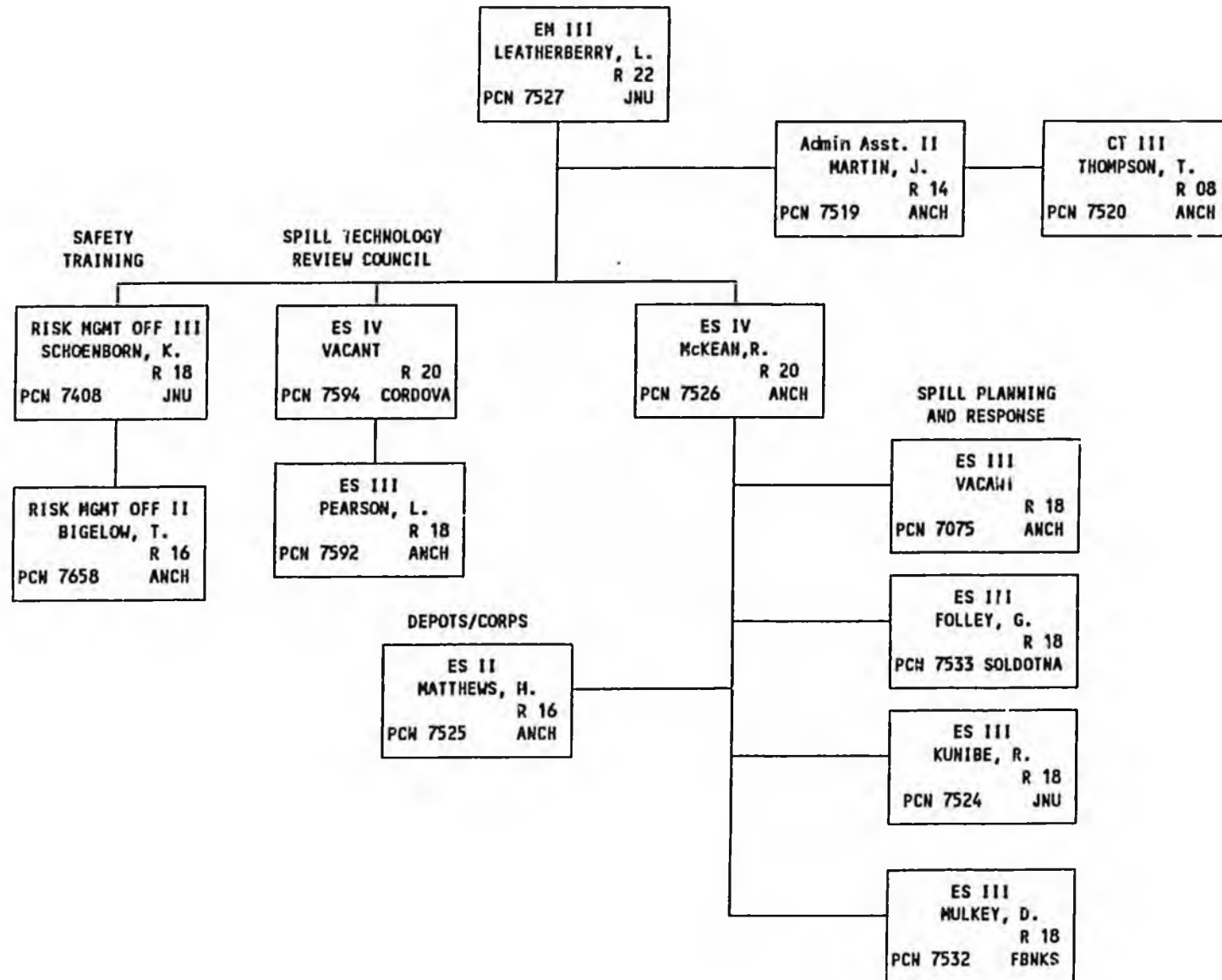
SPILL PREVENTION, PLANNING AND MANAGEMENT

Enclosure II.



**DIVISION OF SPILL PREVENTION AND RESPONSE  
SPILL RESPONSE OFFICE**

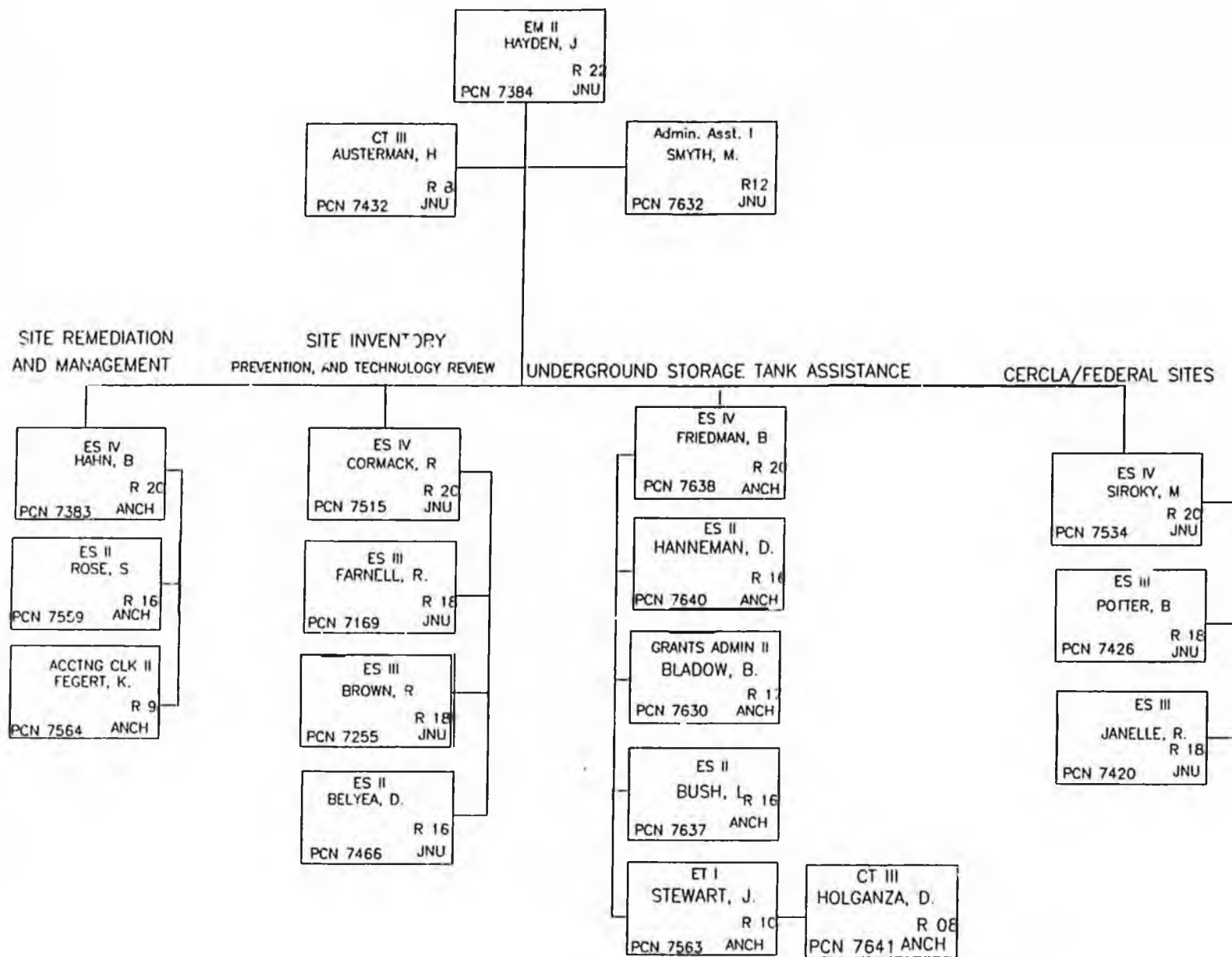
Enclosure III



REVISED 01-16-92

# DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES

Enclosure IV



revised date: 6/21/91

## NONCRUDE OIL FACILITY REPORT

HB 567 required the Department of Environmental Conservation to conduct a survey, inspection and preparation of an inventory of noncrude oil terminal facilities in the state with an effective storage capacity of 5,000 to 10,000 barrels. A Request for Proposals was executed to prepare a report from the results of the survey. ECO Engineering, Inc. was contracted for professional services to provide the report.

The Department is performing a final review of the results prior to transmittal to the Legislature.

HB 567 required an assessment of the conditions of facilities within the size specified and written recommendations concerning discharge prevention and contingency requirements or design review requirements that should be enacted for facilities of less than 10,000 barrels.

The information developed may be utilized by the Legislature to determine if these facilities should be required to have an approved contingency plan.

10 \* Sec. 30. SURVEY OF SMALL NONCRUDE OIL TERMINAL FACILITIES. (a) By  
11 January 31, 1992, the Department of Environmental Conservation shall sur-  
12 vey, inspect, and prepare an inventory of noncrude oil terminal facilities  
13 in the state with an effective storage capacity of 5,000 to 10,000 barrels  
14 in order to determine for each facility

- 15 (1) its actual storage capacity;
- 16 (2) the type of noncrude oil products stored;
- 17 (3) its age, design, construction, and general condition;
- 18 (4) the design and construction standards applicable or rele-  
19 vant;
- 20 (5) the presence or absence of containment structures and equip-  
21 ment;
- 22 (6) its ability to respond to a release or threatened release;
- 23 (7) the environmental sensitivity of the surrounding area and  
24 the potential risk to the environment if a release occurs;
- 25 (8) the presence or absence of surface and subsurface pipelines  
26 and storage tanks; and
- 27 (9) other appropriate information.

28 (b) By January 31, 1992, the Department of Environmental Conservation  
29 shall report to the legislature the results of the survey required under

1 (a) of this section and its written recommendations concerning discharge  
2 prevention and contingency requirements or design review requirements that  
3 should be enacted for noncrude oil terminal facilities with storage capac-  
4 ities of less than 10,000 barrels.

5 (c) Upon completion of the survey required under (a) of this section,  
6 the Department of Environmental Conservation may

- 7 (1) notify each facility of the results of the facility's in-  
8 spection; and
- 9 (2) provide each facility with recommendations and technical  
10 assistance concerning identified deficiencies.

11 (d) The Department of Environmental Conservation may conduct the  
12 inspections required under this section notwithstanding the provisions of  
13 AS 46.04.050. The department shall conduct the inspections at reasonable  
14 times.

## NONCRUDE OIL TRANSPORTATION STUDY

HB 567 required the Department of Environmental Conservation to conduct a study of the transportation of noncrude oil in bulk as cargo on the waters of Alaska and to make recommendations to the Legislature relating to oil discharge prevention and contingency planning for this industry. A contract for this study was awarded to Arthur D. Little Inc. of Cambridge, Mass. for \$90,000.

Recommendations were to be made on the following four key issues:

1. the location of regional response depot locations;
2. discharge response times for noncrude tank vessels and barges;
3. on-board personnel and equipment requirements;
4. industry and local government response roles.

The contractor's report and information gathered from industry representatives were used to prepare recommendations to the Legislature. The Legislature was to use these recommendations to evaluate the noncrude response planning standard established by HB567 (AS 46.04.030(k)(4)). This report and the recommendations were forwarded to the Legislature on December 30, 1991.

G:\sppm\clerical\opc\adlpara

15 \* Sec. 31. STUDY RELATING TO NONCRUDE OIL TANKERS AND BARGES. By  
16 July 1, 1991, the Department of Environmental Conservation shall conduct a  
17 study and report to the legislature its recommendations concerning the  
18 following issues related to oil discharge prevention and contingency plan-  
19 ning for tank vessels and oil barges carrying noncrude oil in bulk as  
20 cargo:

21 (1) appropriate locations for regional response depots, based on  
22 an assessment of historical evidence of where noncrude oil discharges are  
23 most likely to occur and the needs of remote areas of the state such as  
24 western and northern Alaska and the Aleutians;

25 (2) appropriate discharge response times;

26 (3) requirements for personnel and equipment that should be  
27 imposed on contingency plan holders;

28 (4) appropriate roles for industry and state and local govern-  
29 ments in the purchase, ownership, and positioning of discharge response  
1 efforts.

# STATE OF ALASKA

## DEPT. OF ENVIRONMENTAL CONSERVATION

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

WALTER J. HICKEL, GOVERNOR

FAX No.  
(907)465-5070

Telephone No.  
(907)465-5050

December 30, 1991

The Honorable Ben Grussendorf  
Speaker of the House of Representatives  
Alaska State Legislature  
1221 Halibut Point Road  
Sitka, AK 99835

Dear Representative Grussendorf:

House Bill 567, signed into law by the Governor in 1990, required the Department of Environmental Conservation to conduct a study and make recommendations to the Legislature relating to oil discharge prevention and contingency planning for tank vessels and oil barges carrying noncrude oil in bulk as cargo. The four key issues are: (1) regional response depot locations; (2) discharge response times for noncrude tank vessels and oil barges; (3) on-board personnel and equipment requirements; and, (4) industry and local government response roles. To assist the Department in that study, a Request for Proposals was issued on December 5, 1990 and, following a review of the proposals submitted, a contract was awarded to Arthur D. Little, Inc. of Cambridge, Massachusetts on February 12, 1991.

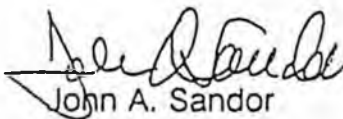
After the report was completed, the Department solicited comments from a number of organizations and individuals, including the members of the State Emergency Response Commission, Local Emergency Planning Committees, the Federal Alaska Regional Response Team, the "Oiled Mayors," and representatives from the noncrude industry. The Department hosted a meeting with noncrude operators on September 23, 1991 to discuss the report and recommendations to be made to the Legislature. The purpose of the meeting was to exchange information, and not to prepare group recommendations.

The results of the study, comments solicited from interest groups and noncrude industry operators, and discussions held at the noncrude industry meeting have been used as a basis for preparing the enclosed recommendations. The report compiled is a picture of the situation as it existed when the information was gathered. The time frame in which the contractor compiled his statistics was February to May, 1991. The response capability of the existing depots and storehouses of equipment is constantly changing. There may have been some spills overlooked due to poor record keeping by regulating authorities in the early years, and there has been at least one spill in Western Alaska since the report was completed.

*Representative B. Grussendorf*  
*December 30, 1991*  
*Page 2*

The Department is available to work with the Legislature in their further consideration of response planning standards for noncrude tank vessels and oil barges. If you desire a briefing after review of these recommendations and the enclosed report, please contact the Department and we will schedule one at your convenience. The Department feels these recommendations reinforce our new oil pollution regulations and will be another stride for Alaska in protecting its environment.

Sincerely,

  
John A. Sandor  
Commissioner

cc: Janice Adair

Enclosures: ADEC Recommendations  
A.D. Little Report  
State Regional Map

# STATE OF ALASKA

## DEPT. OF ENVIRONMENTAL CONSERVATION

OFFICE OF THE COMMISSIONER  
41C WILLOUGHBY #105, JUNEAU, AK 99801-1795

*Done 1/2/91*  
WALTER J. HICKEL, GOVERNOR

FAX No.  
(907)465-5070

Telephone No.  
(907)465-5050

December 30, 1991

The Honorable Richard I. "Dick" Eliason  
President of the Senate  
Alaska State Legislature  
P.O. Box 143  
Sitka, AK 99835

Dear Senator Eliason:

House Bill 567, signed into law by the Governor in 1990, required the Department of Environmental Conservation to conduct a study and make recommendations to the Legislature relating to oil discharge prevention and contingency planning for tank vessels and oil barges carrying noncrude oil in bulk as cargo. The four key issues are: (1) regional response depot locations; (2) discharge response times for noncrude tank vessels and oil barges; (3) on-board personnel and equipment requirements; and, (4) industry and local government response roles. To assist the Department in that study, a Request for Proposals was issued on December 5, 1990 and, following a review of the proposals submitted, a contract was awarded to Arthur D. Little, Inc. of Cambridge, Massachusetts on February 12, 1991.

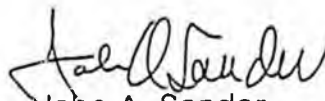
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The results of the study, comments solicited from interest groups and noncrude industry operators, and discussions held at the noncrude industry meeting have been used as a basis for preparing the enclosed recommendations. The report compiled is a picture of the situation as it existed when the information was gathered. The time frame in which the contractor compiled his statistics was February to May, 1991. The response capability of the existing depots and storehouses of equipment is constantly changing. There may have been some spills overlooked due to poor record keeping by regulating authorities in the early years, and there has been at least one spill in Western Alaska since the report was completed.

Senator R. Eliason  
December 30, 1991  
Page 2

The Department is available to work with the Legislature in their further consideration of response planning standards for noncrude tank vessels and oil barges. If you desire a briefing after review of these recommendations and the enclosed report, please contact the Department and we will schedule one at your convenience. The Department feels these recommendations reinforce our new oil pollution regulations and will be another stride for Alaska in protecting its environment.

Sincerely,



John A. Sandor  
Commissioner

cc: Janice Adair

Enclosures: ADE( ) Recommendations  
A.D. Little Report  
State Regional Map

# ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION RECOMMENDATIONS FOR NONCRUDE TANK VESSELS AND BARGES

## REGIONAL RESPONSE DEPOT LOCATIONS

### Recommendation:

The Department's contractor addressed only spills from tank vessels or barges carrying noncrude oil as cargo, and not spills from fishing vessels or other sources. The enclosed report does not include spills less than 1000 gallons. The recommendations in this report apply only to the noncrude marine transportation industry, and not land transportation of noncrude or any other hazardous materials. Dangers from other modes of transportation and substances are being studied separately by this Department in a statewide hazards analysis.

HB 567 requested recommendations for appropriate locations of regional response [equipment] depots, based on an assessment of historical evidence of where noncrude oil (any refined petroleum product from crude oil) discharges have occurred and where they are most likely to occur in the future, considering the needs of remote areas of the State, such as western and northern Alaska and the Aleutian Island.

Criteria used in this study to rank and evaluate locations for regional equipment depots include:

- proximity of sensitive environmental habitats;
- physical risk (hazards associated with weather, marine considerations, or channel configuration);
- annual volume of noncrude oil transported close to shore;
- spill history; and,
- adequacy of existing response capabilities (equipment and personnel).

The Southeast region of the State has the highest recorded number of noncrude oil spills from transportation, with ten (10) of the documented twenty-one (21) noncrude spills greater than 1,000 gallons since 1973. A total of 165 million gallons of noncrude oil product are transported throughout this region annually. Spill response equipment is located at various shore-based facilities; however, the amount of equipment is inadequate to respond to large spills. The coastal area of the Southeast region is also environmentally diverse, consisting of numerous highly sensitive sheltered coves, marshes and mudflats. Because of the nearness of shipping routes to coastal areas, spills can be expected to rapidly impact the coastal area. Following the Legislative intent to address spills from noncrude transportation only, the Department recommends that the first depot for noncrude marine discharges be located in the Southeast region. A specific site in the Southeast for the depot was not designated.

The Aleutian region has had the second greatest number of spills in the State and there is a severe lack of spill response equipment in this region. The Department recommends that the second depot be located in the Aleutian region. The remaining regions are prioritized as locations for regional response depots, based on their spill history and existing response resources identified in the Arthur D. Little Report.

Cook Inlet Region  
Prince William Sound Region  
North Slope Region  
Kodiak Region  
Bristol Bay Region  
Western Region  
Interior Region  
Northwest Arctic Region

Regional boundaries as used in this discussion are those set forth in 18 AAC 75.386 (see attached map). The results of this study will be used by the Department in conjunction with a statewide hazards analysis to select a specific site within each region where a depot would be most effective, and to identify whether or not the greatest hazards are posed by persistent or nonpersistent noncrude products.

#### DISCHARGE RESPONSE TIMES FOR NONCRUDE TANK VESSELS AND OIL BARGES

##### Recommendation:

The current response planning standard mandated by HB 567 states that a noncrude tank vessel or barge shall plan to be able to contain or control fifteen (15) percent of the maximum capacity, or the realistic maximum oil discharge (whichever is greater), within 48 hours and cleanup the discharge within the shortest possible time consistent with minimizing damage to the environment. Discharge response times must be rapid as noncrude containment and control effectiveness diminishes rapidly with time, with the ability to contain or control beyond 24 hours seriously diminished and beyond 48 hours largely ineffective. Discharge response times must also be kept short as transportation routes are in close proximity to shorelines and environmentally sensitive areas. The Department also recognizes that dispersion of various noncrude products varies greatly. Light end products, such as gasoline, disperse rapidly and are difficult to contain, control, or cleanup; while heavier fractions, such as bunker or residual fuels (#6 oil), are very persistent and likely to cause significant impacts. Response times in all cases must therefore be rapid to have any effect at all. The Department recommends that the response times, as reflected in the regulations recently adopted by the Department for noncrude tank vessels and oil barges, be retained at 48 hours for containment and control with further consideration for establishment of a 72 hour cleanup for heavy noncrude products, such as bunker and residual fuels (#6 oil).

HB 567 requested recommendations related to discharge response times for noncrude tank vessels and oil barges.

## ON-BOARD PERSONNEL AND EQUIPMENT REQUIREMENTS

### Recommendation:

Due to the limited amount of response equipment presently carried on-board tank vessels and barges, and the difficulty in mobilizing shore-based response equipment using planes and vessels for transport to the scene, the ability to adequately respond within the statutory time frame to contain and control a substantial amount of product is not present at this time. The Department recommends that industry contingency planning include the installation of on-board equipment, and the establishment and strategic positioning of cooperative spill response organizations to allow attainment of a 48 hour response time to contain or control a discharge.

Sufficient equipment and personnel should be carried on-board a tank vessel or a tug and tow combination, or be available locally so as to be deployed and operating within 48 hours to contain and control a spill. The exact amount of equipment and personnel will be based on the response planning standards for the individual vessel.

HB 567 requested recommendations outlining requirements for personnel and equipment that should be carried on-board vessels.

## INDUSTRY AND LOCAL GOVERNMENT RESPONSE ROLES

### Recommendation:

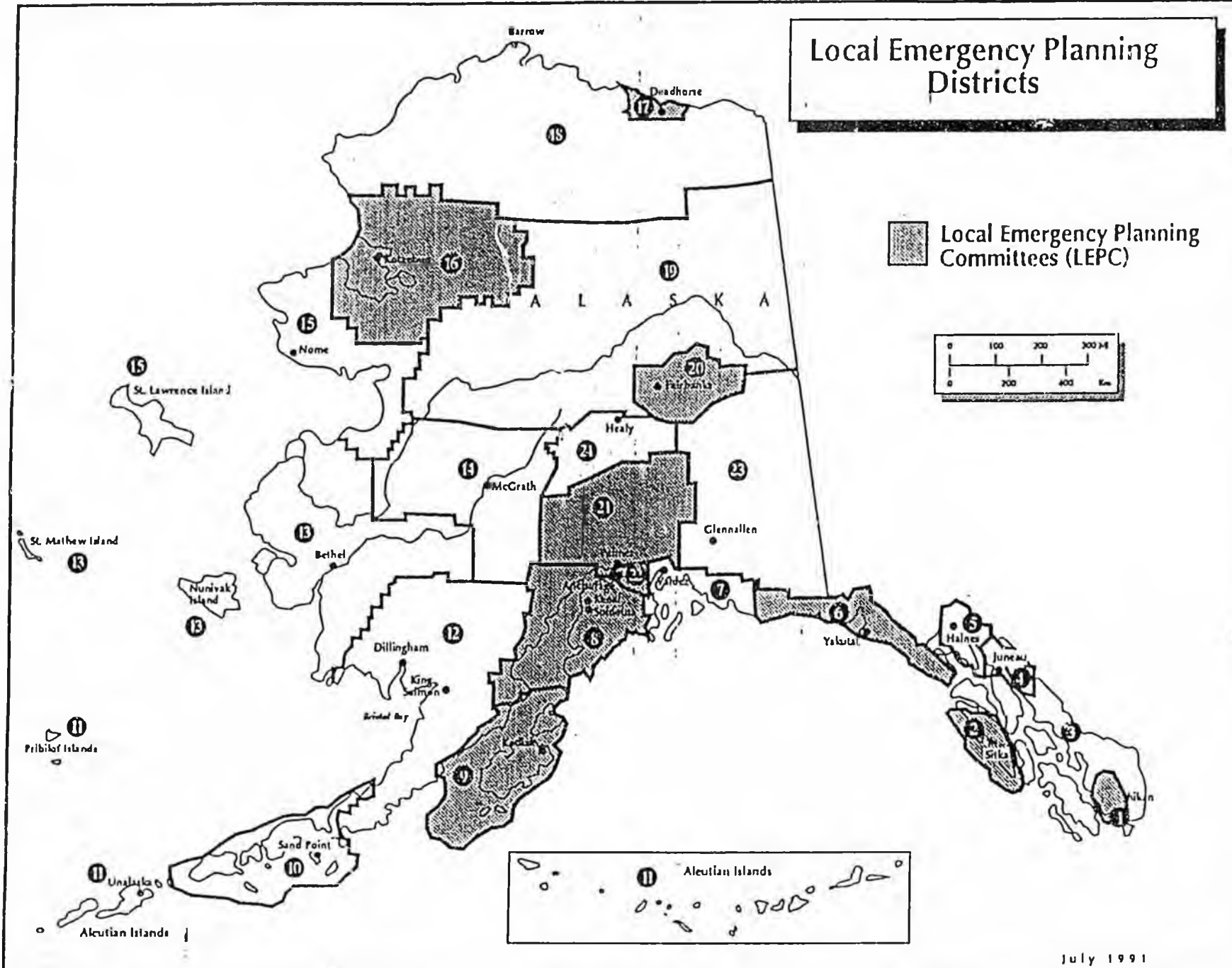
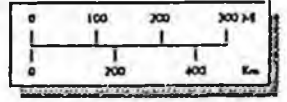
As the contingency plan holder, industry has the primary responsibility for spill response. The Department encourages and recommends the formation and maintenance of a series of cooperative spill response organizations throughout the State that will allow industry to respond within the recommended times for discharges. Ownership, operation, purchase and maintenance of equipment will be the responsibility of the contingency plan holders. The Department will take the lead in contacting industry and discussing the formation of cooperatives in those areas that are not already adequately covered by other means of response.

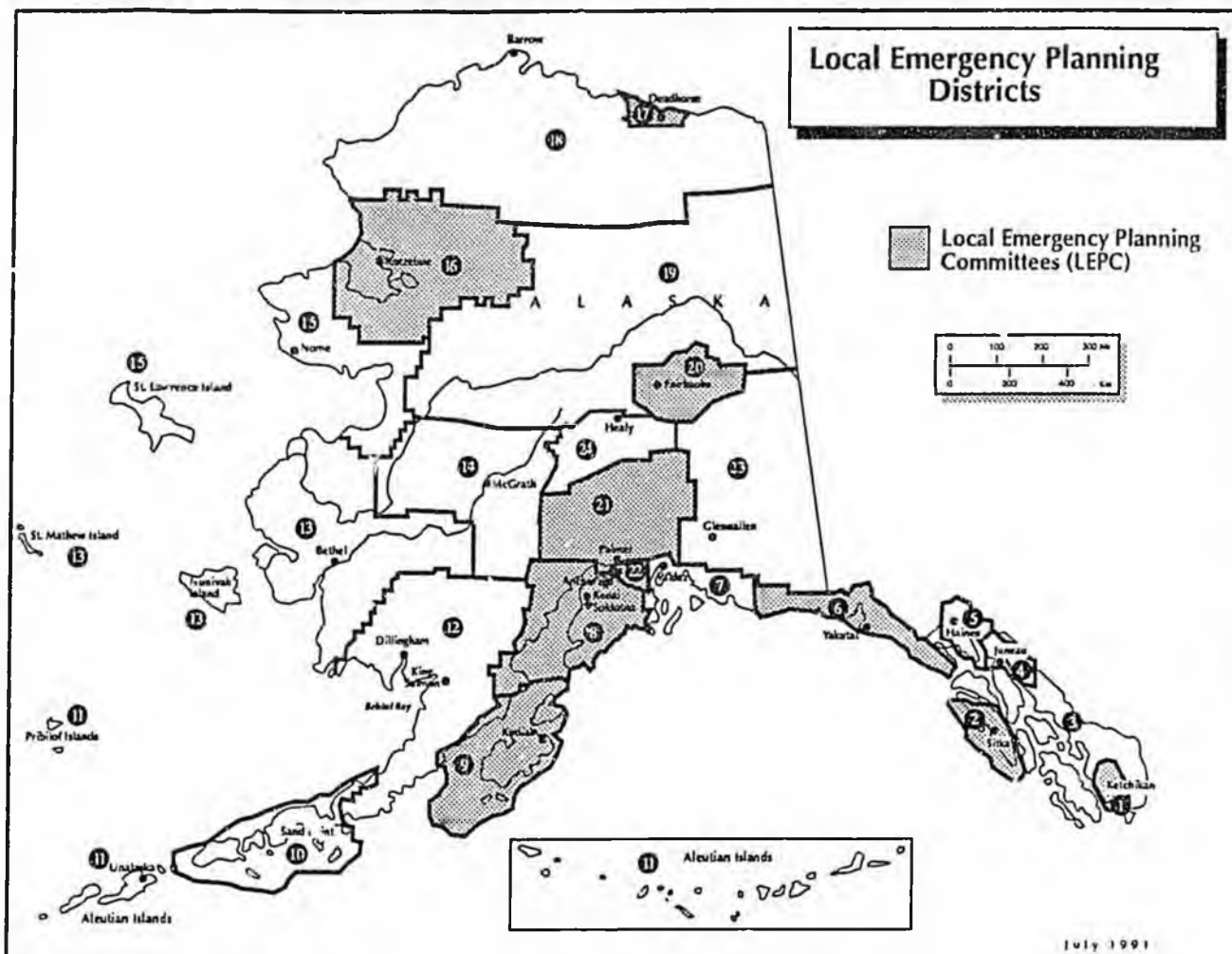
HB 567 requested recommendations outlining appropriate roles for industry, State and local governments in the purchase, ownership, and positioning of discharge response efforts.

The Department will assist with organized response efforts by planning for catastrophic spills. The feasibility of establishing State owned equipment depots in the regions mentioned will be researched, and the Department will coordinate efforts with industry, local governments, State agencies and interested citizen organizations. The Department is presently coordinating with the Division of Emergency Services for equipment depots and emergency response. Any equipment that is in these State depots will be used by the State to supplement a spiller's response effort, regardless of the size of the spill. Equipment from State owned depots can be used on spills from vessels that are not required to have a contingency plan at the responsible party's expense.

# Local Emergency Planning Districts

 Local Emergency Planning Committees (LEPC)





Map Key	Local Emergency Planning District (LEPD)	Principal City	LEPC appointed by SERC
1	KETCHIKAN GATEWAY BOROUGH*	Ketchikan	April 4, 1991
2	CITY & BOROUGH OF SITKA*	Sitka	May 14, 1990
3	Setheast	Juneau	
4	City and Borough of Juneau	Juneau	
5	Lynn Canal	Haines	
6	CITY OF YAKUTAT*	Yakutat	September 18, 1989
7	Prince William Sound	Valdez	
8	KENAI PENINSULA BOROUGH*	Soldotna	June 9, 1989
9	KODIAK ISLAND BOROUGH*	Kodiak	June 9, 1989
10	Aleutians East Borough	Sand Point	
11	Aleutian Islands	Unalaska	
12	Bristol Bay	Dillingham	
13	Yukon Delta	Bethel	
14	Southwestern Interior	McGrath	
15	Northwestern	Nome	
16	NORTHWEST ARCTIC BOROUGH*	Kotzebue	June 14, 1991
17	PRUDHOE BAY*	NA	June 14, 1991
18	North Slope Borough	Barrow	
19	Interior Alaska	Fairbanks	
20	FAIRBANKS NORTHSTAR BOROUGH*	Fairbanks	June 9, 1989
21	MATANUSKA-SUSITNA BOROUGH*	Palmer	June 14, 1991
22	MUNICIPALITY OF ANCHORAGE*	Anchorage	June 14, 1991
23	Southeastern Interior	Glennallen	
24	Denali Boroughs	Healy	



## The UST Financial Assistance Programs

(1) **TANK TIGHTNESS TESTING AND SITE ASSESSMENT INCENTIVE PROGRAM:**

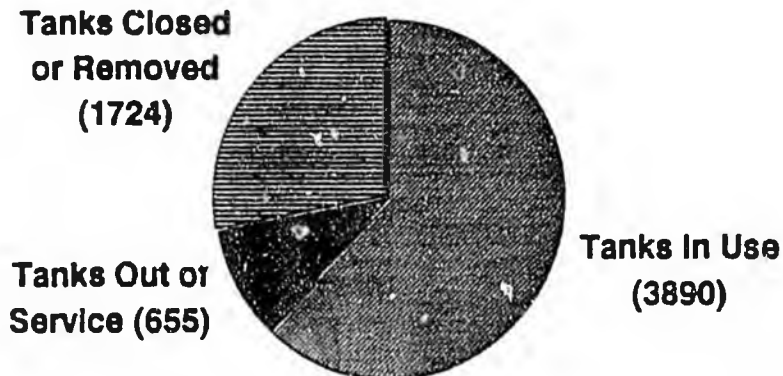
Reimbursement for up to 50% of the eligible costs to conduct a tank tightness test or a site assessment. This work must be completed within one year of registration in order to be considered for reimbursement. Limited to \$300 per tank up to \$1200 per facility for tightness tests and \$800 per tank and \$3200 per facility for site assessments.

(2) **UPGRADE AND CLOSURE GRANT PROGRAM:** Grants for 60%, up to \$60,000, for the costs of either upgrading (including replacing) or closing (including removing) a pre-1988 UST. Upgrading an UST would include adding leak detection, spill and overflow prevention, or cathodic protection. This money will be available to owners and operators either as an upfront grant or as a reimbursement for work done prior to application. All work must meet the performance standards set out in Article 1 in order to qualify.

(3) **CLEANUP GRANT AND LOAN PROGRAM:** Grants for 90% up to \$1 million per occurrence for the cost of cleanup associated with a release from an UST. The owner is responsible for 10% of the cost up to a maximum of \$25,000. That amount may be loaned to him at no interest. The regulations propose that it be repaid to the state within 5 years.

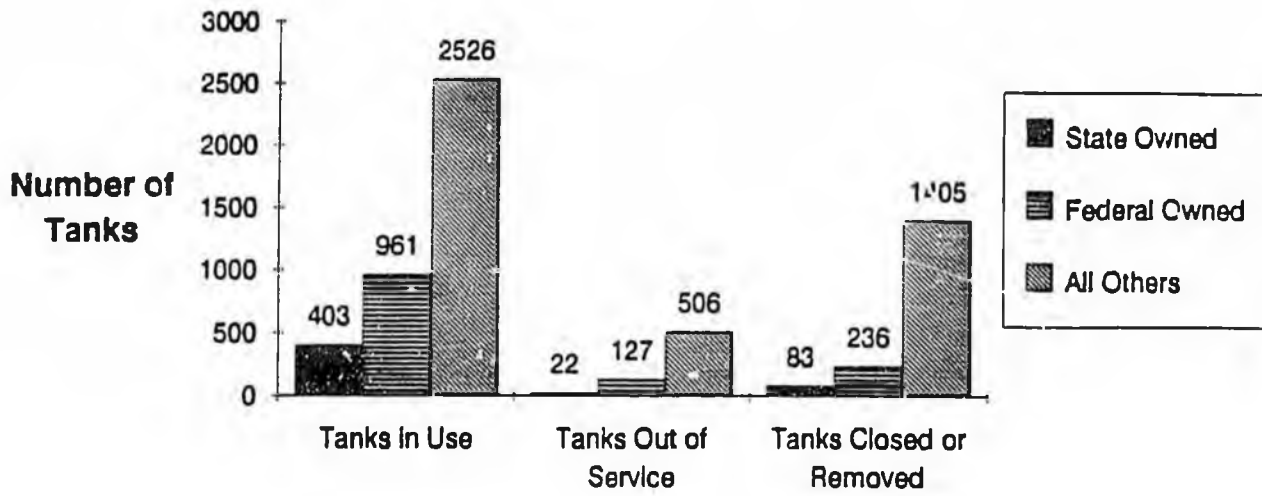
(4) **RETROACTIVE REIMBURSEMENT PROGRAM:** Reimbursement for upgrading, closing, or cleanup of an UST done after the effective date of the EPA regulations (December 22, 1988) and before the effective date of HB 220 (September 5, 1990) may be applied for on or before March 5, 1991. Amounts are limited to 60% of upgrading or closing, 90% of cleanup, to a dollar maximum of \$200,000 per owner and operator.

## Status of Underground Storage Tanks in Alaska

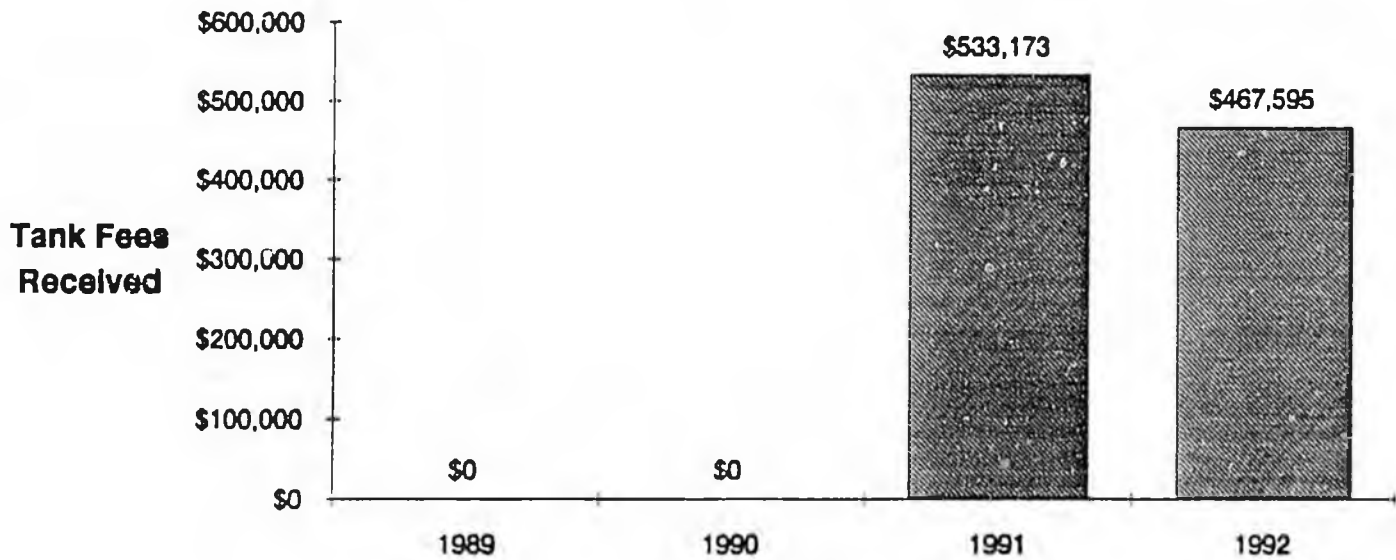


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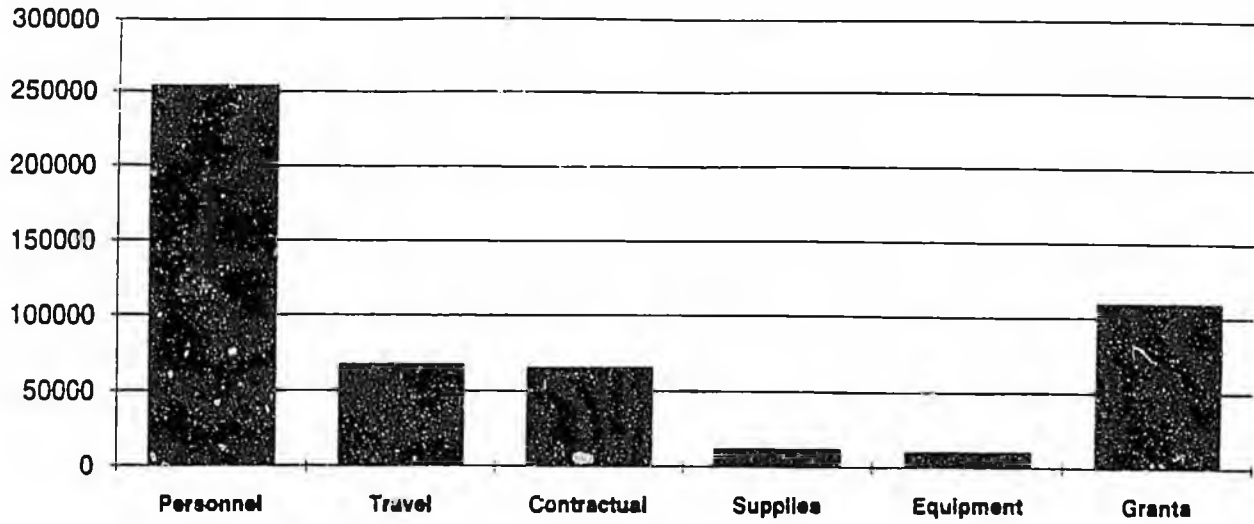
## Ownership of Underground Storage Tanks in Alaska



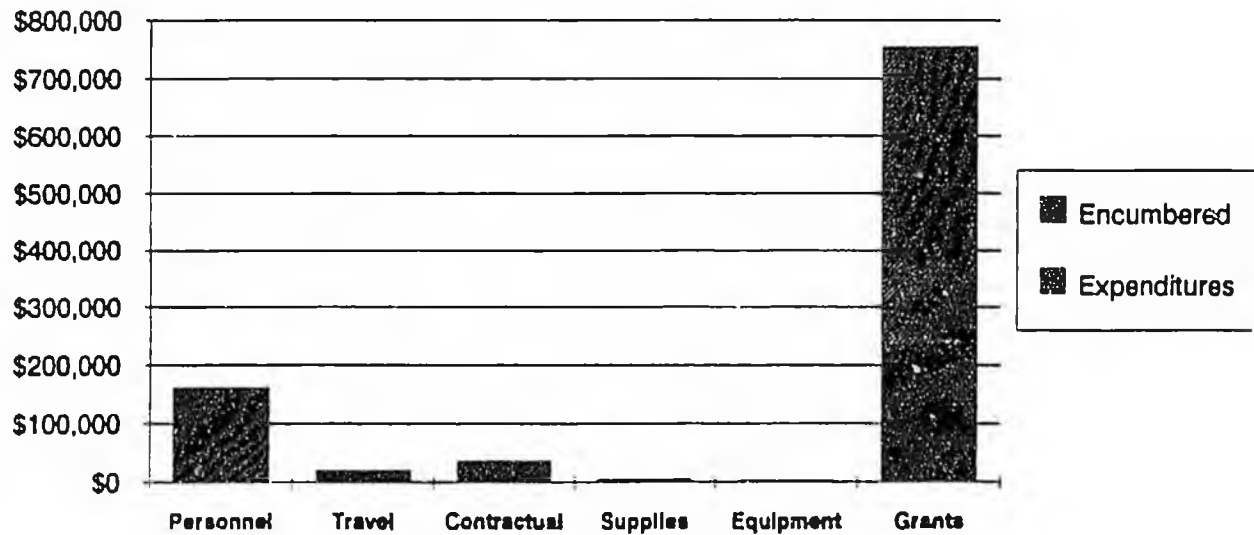
## Tank Registration Fees By Year (As Received Through January 15, 1992)



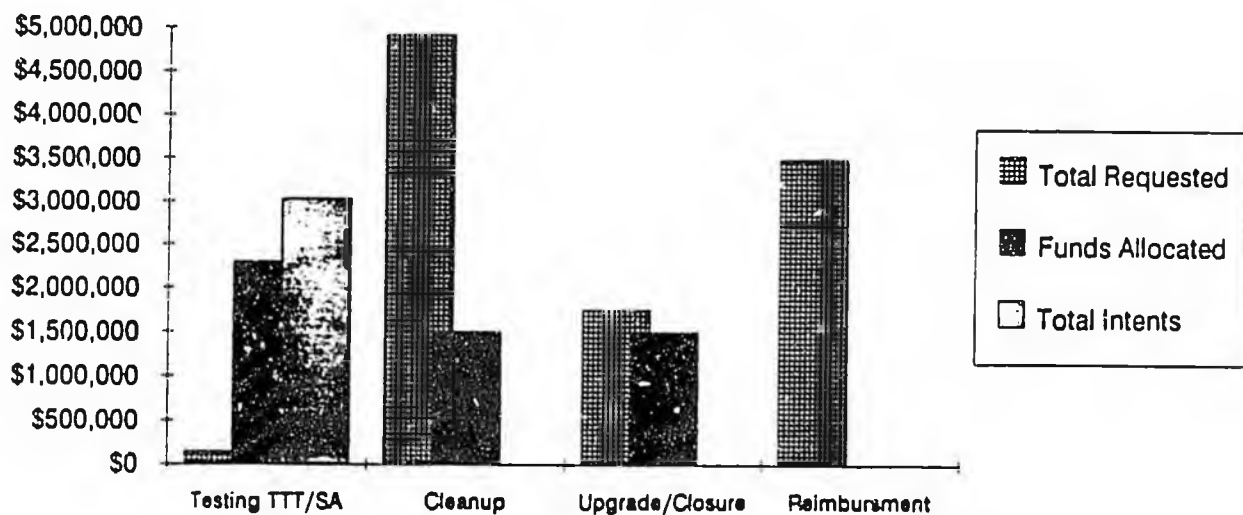
### UST FINANCIAL ASSISTANCE PROGRAM FY 91 EXPENDITURES



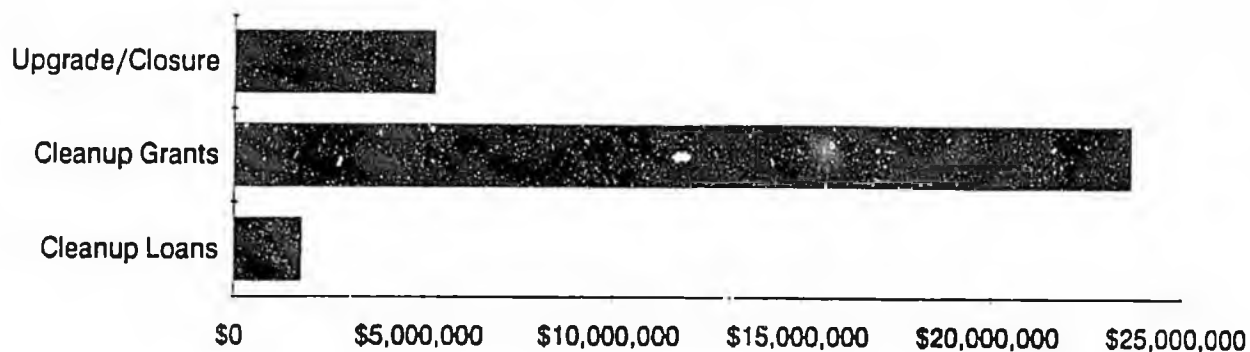
### UST FINANCIAL ASSISTANCE PROGRAM FY 92 EXPENDITURES TO JANUARY, 1992



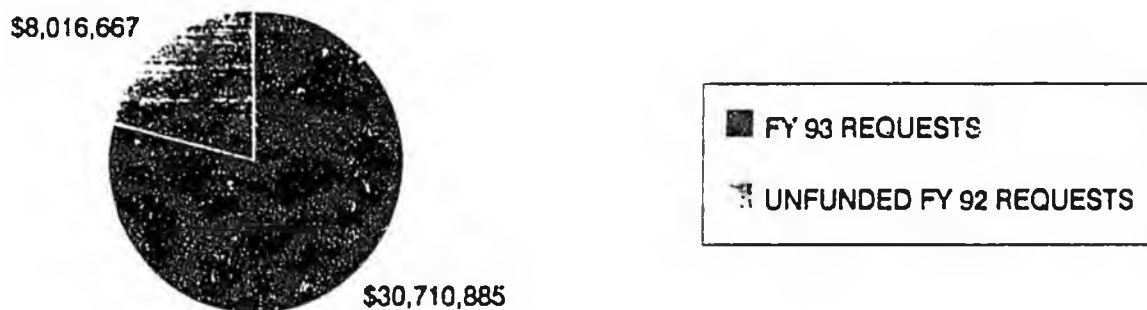
## FY 92 SUMMARY OF GRANT PROGRAMS AS OF JANUARY 1992



## Total Financial Assistance Requests to-date for FY 93



## PROJECTED FINANCIAL ASSISTANCE GRANTS & LOANS FOR FY 93



## Grant Funds For Financial Assistance Program Allocated For FY 92

### PROGRAM SUMMARY FOR FY 92

Number Applications Received for FY 92 Funding	454
Total Dollar Amount of Application Requests	\$10,287,352
Total Dollar Amount of Application Requests Including TTT/SA Intents	\$13,316,667
Funds Allocated FY 92	\$5,300,000
Authorized Allocations to 12/31/91	\$2,790,380

### TANK TIGHTNESS TESTING AND SITE ASSESSMENT INCENTIVE PROGRAM

#### Tank Tightness Testing

Total Number Applications Received	131
Dollar Amount of Application Requests	\$95,008
Authorized Allocations to 12/31/91	\$22,023

#### Site Assessment

Total Number Applications Received	29
Dollar Amount of Application Requests	\$45,257
Authorized Allocations to 12/31/91	\$13,758

#### Program Total

Dollar Amount of Intents from 1991 Registrations	\$3,029,315
Funds Allocated FY 92	\$2,300,000
Authorized Allocations to 12/31/91	\$35,781

### TANK CLEANUP GRANT AND LOAN PROGRAM

Total Number Applications Received	30
Dollar Amount of Application Requests	\$4,907,197
Funds Allocated FY 92	\$1,500,000
Authorized Grant Allocations to 12/31/91	\$1,173,429
Authorized Loan Allocations to 12/31/91	\$119,022

### TANK UPGRADING AND CLOSURE PROGRAM

#### Tank Upgrading

Total Number Applications Received	28
Dollar Amount of Application Requests	\$806,037
Authorized Allocations to 12/31/91	\$676,108

#### Tank Closure

Total Number Applications Received	74
Dollar Amount of Application Requests	\$946,785
Authorized Allocations to 12/31/91	\$786,040

#### Program Total

Funds Allocated FY 92	\$1,500,000
Authorized Allocations to 12/31/91	\$1,462,148

### REIMBURSEMENT PROGRAM

Total Number Applications Received	162
Dollar Amount of Application Requests	\$3,487,068
Funds Allocated FY 92	\$0
Authorized Allocations to Date	\$0

## Projected Costs For Financial Assistance Program For FY 93

### PROGRAM SUMMARY FOR FY 93

Number Applications Received for FY 93 Funding	539
Total Dollar Amount of Application Requests	\$30,710,885

### TANK CLEANUP GRANT AND LOAN PROGRAM

Total Number Applications Received	172
Dollar Amount of Application Requests (Grants)	\$23,663,538
Dollar Amount of Application Requests (Loans)	\$1,777,664
Total Dollar Amount of Application Requests	\$25,441,202

### TANK UPGRADING AND CLOSURE PROGRAM

#### Tank Upgrading

Total Number Applications Received	101
Dollar Amount of Application Requests	\$2,264,799

#### Tank Closure

Total Number Applications Received	266
Dollar Amount of Application Requests	\$3,004,884

#### Program Total

Total Number Applications Received	367
Total Dollar Amount of Application Requests	\$5,269,683

**Department of Environmental Conservation  
Division of Environmental Quality**

The Division of Environmental Quality (EQ) is a regulatory, technical assistance arm of the agency charged with the protection of the State's air, land, and water. To accomplish this, the division has seven major programs under its purview: Solid and Hazardous Waste Management, Air Quality Management, Water Quality Management, Wastewater and Water Treatment Management, Pollution Prevention Program, Monitoring and Laboratory Operations, and the Community Agreement Program.

These programs are all Statewide in scope. In order to accomplish all the multifaceted aspects of these programs, the Department is composed of two operational segments. These include Central Office units and Regional/District Offices. Broadly stated, the functions of these two operational units are as follows:

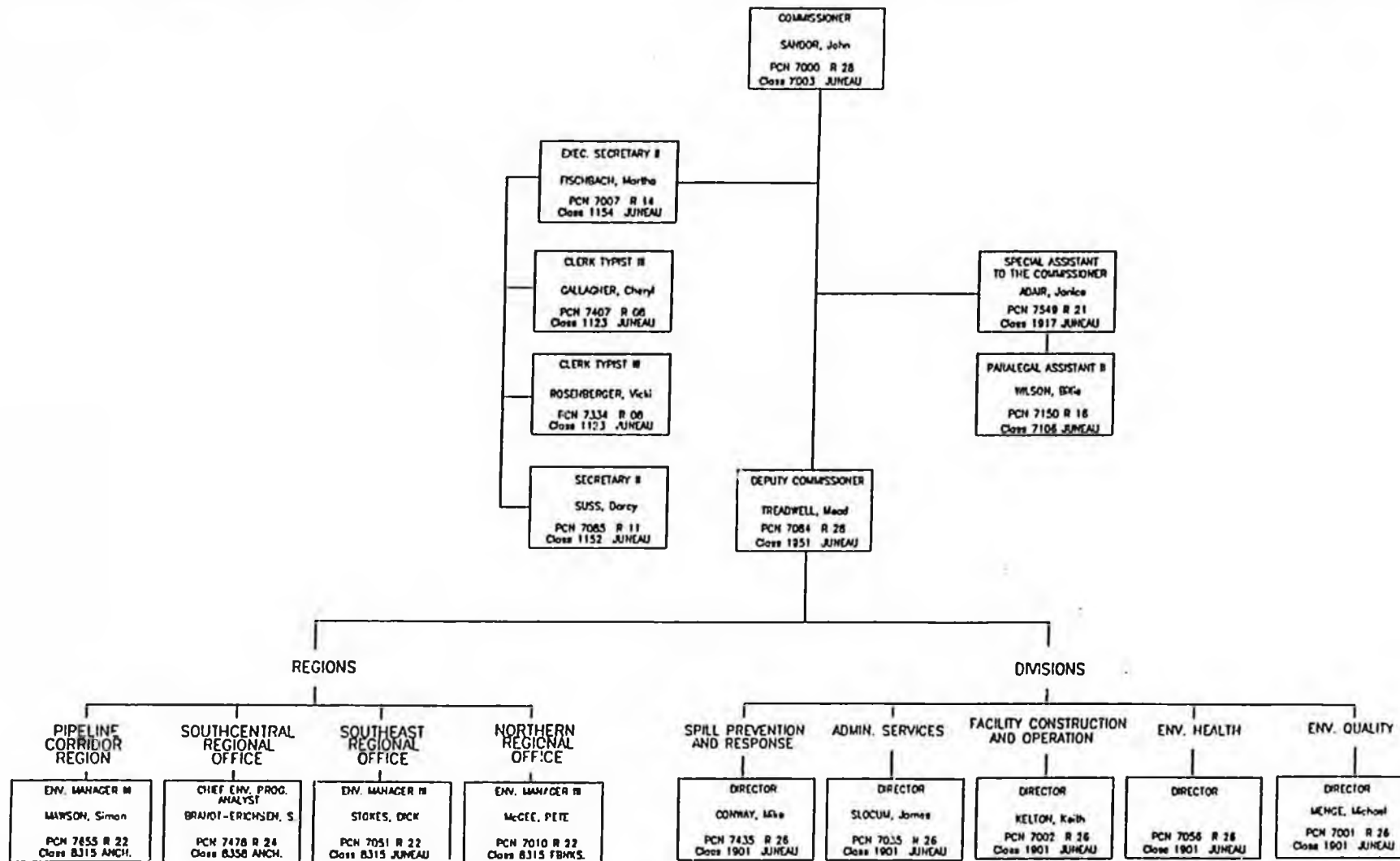
Central Office: This Juneau-based organization is responsible for carrying out three broad initiatives: one, ensuring the conversion of State of Alaska administrative and legislative direction (policy) and U.S. Environmental Protection Agency (EPA) guidance into consistent Statewide operational programs; two, the analyses of data generated at field offices as a basis to determination if existing programs are functioning as intended or if there is a need for modification or new program development; and third, ensure that all field programs are being carried out with a high degree of quality, Statewide consistency (taking into consideration regional variations), and efficiency.

Regional/District Offices: These units are located throughout the State and perform the operational-based functions of the Department. They are responsible for the day-to-day direct implementation of Department programs. They also serve as a direct face-to-face link with the citizens of Alaska and the regulated public. Beyond implementation, the offices provide the critical feedback data required to measure success of programs and contribute to the definition of the need for new or modified approaches to problem solution.

**Environmental Quality Central Office:**

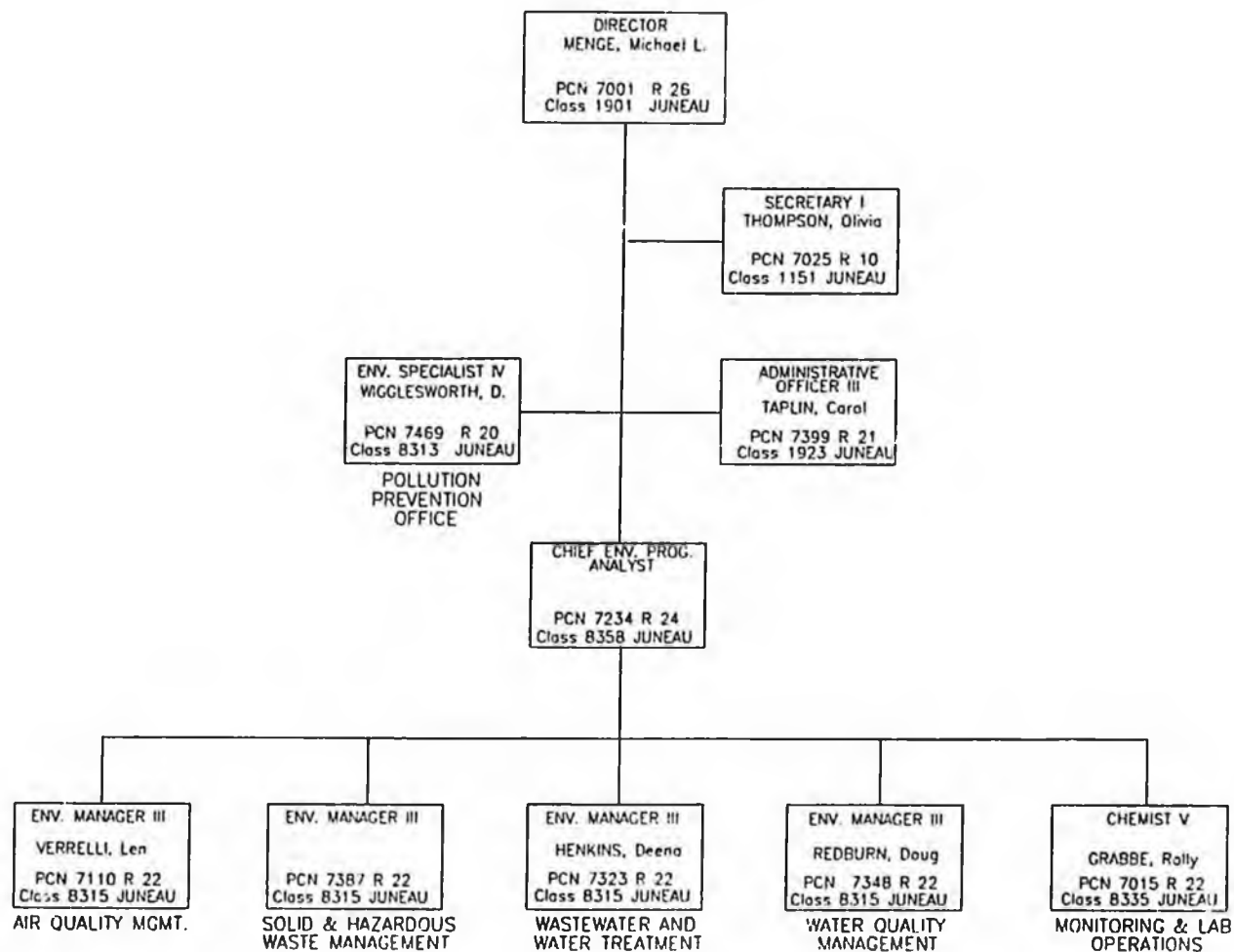
Under the Department's regional structure, the EQ Director is responsible for Statewide program integrity. This includes policy guidance; program development, review, quality, and consistency; and program audit responsibility. To assist in these tasks, the director has direct management authority over all Division of Environmental Quality personnel within the Central Office. EQ Central Office is divided into seven organizational units. They are as follows:

1. Air Quality Management Program
2. Wastewater and Water Treatment Program
3. Hazardous and Solid Waste Program
4. Water Quality Management Program
5. Pollution Prevention Program
6. Community Agreements Program
7. Monitoring and Laboratory Program



Approved \_\_\_\_\_  
Commissioner Date

DIRECTOR'S OFFICE



Approved \_\_\_\_\_  
 Director Date

The goals for each of these programs are presented below. Attachments 1 through 7 go into more specific detail on each of the programs presenting organizational structures and summaries of activities.

**Air Quality Management Program:**

It is the goal of this program to safeguard public health from air pollutants' harmful effects, fostering the use of technology which enables economic development to have minimal reduction in air quality, and to preserve the high level of existing air quality for the enjoyment and well-being of all.

The goals of this program are implemented by scientific and technical staff organized into subunits specializing in ambient air analysis; inspections, permits, and enforcement; air toxic studies, regulation development, and advance technology application studies; and transportation control, data analysis, and reporting.

See Attachment 1 for program organization and activity summaries.

**Wastewater and Water Treatment Program:**

It is the goal of this program to ensure that all water provided to consumers by public drinking water systems is safe from harmful chemical and bacterial contaminants, and ensure that domestic and industrial wastewater is treated and disposed of in a manner that protects public health and the environment.

The goals of this program are implemented by scientific and technical staff organized into subunits specializing in water treatment (drinking water), industrial wastewater, domestic wastewater, and mining.

See Attachment 2 for program organization and activities summaries.

**Hazardous and Solid Waste Program:**

It is the goal of this program to protect the public health and environment of Alaska from the immediate and long-term effects of improper solid waste and hazardous waste management and disposal.

The goals of this program are implemented by scientific and technical staff organized into subunits specializing in hazardous waste management and solid waste management.

See Attachment 3 for program organization and activities summaries.

**Water Quality Management Program:**

It is the goal of this program to enhance and protect the high quality of all of Alaska's surface water, groundwater, and marine water.

The goals of this program are implemented by scientific and technical staff organized into subunits specializing in water quality standards; nonpoint source activities, groundwater quality, and resource development (coastal zone coordination).

See Attachment 4 for program organization and activities summaries.

#### **Pollution Prevention Program:**

It is the goal of the Pollution Prevention Program to change the approach to protecting public health and the environment by eliminating or reducing pollutants at their source rather than controlling pollution through response mitigation, treatment, and disposal.

These goals are implemented through programs designed to fully integrate pollution prevention into Department functions; through an established pollution prevention steering committee of top DEC policy makers; maintenance and expansion of existing nonregulatory service delivery programs to the public and industry (grants, technical assistance, newsletters); and continued implementation of interagency partnerships to fully implement the goals of pollution prevention throughout Statewide permitting activities.

See Attachment 5 for organization and activities summaries.

#### **Community Agreements Program:**

The goal of the Community Agreements Program is the protection of human health and the environment through the identification of common concerns between communities and the Department. It is also the goal of the Community Agreements Program that once these issues have been identified, common plans of action will be instituted to jointly address and act upon the problem by both organizations.

These goals are implemented through programs designed to identify communities interested in pursuing the agreements, create a series of community specific agreement(s) outlining problems and actions each partner will take to help resolve identified issues, and identification of specific responsibilities within both the community and the Department to ensure that the agreement is maintained in a current state.

See Attachment 6 for a current list of executed and pending community agreements.

#### **Monitoring and Laboratory Program:**

The goal of the Monitoring and Laboratory Program is to provide rapid, error-free, high quality analytical laboratory testing and monitoring services in support of Departmental programs. In addition, it is the goal of this program to provide work opportunities for private testing firms through ongoing high quality certification and quality control procedures.

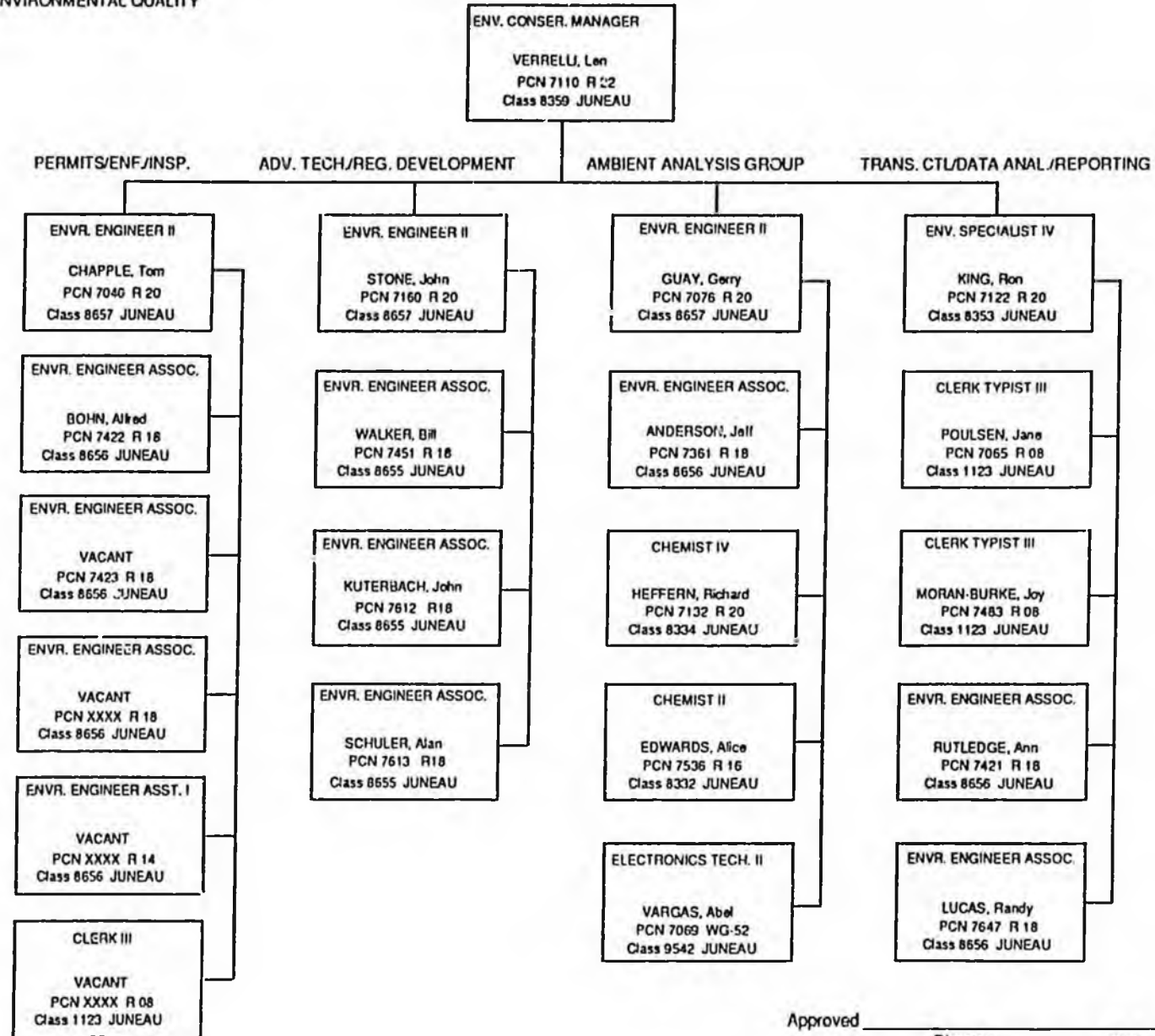
The goals of this program are implemented by scientific and technical staff organized into subunits specializing in laboratory services, monitoring, quality assurance, and toxicology.

See Attachment 7 for organization and activities summary.

**Environmental Quality Regional/District Offices:**

Under the regional structure, all employees in the Regional and District Offices are under the direct management control of the Regional Managers. Each of the program organizational units contained within the Central Office, with the exception of the Monitoring and Laboratory, has a direct counterpart in the Regional Offices. District Offices because of their variety in sizes do not all have parallel organizational units.

AIR QUALITY MANAGEMENT



Approved \_\_\_\_\_ Date \_\_\_\_\_  
Director

**Department of Environmental Conservation  
Division of Environmental Quality  
Air Quality Management**

**Transportation Control Group**

Activity Summary:

- o Conduct Annual Alaska Inspection/Maintenance (I/M) Program Meeting.
- o Fairbanks I/M Program Winter Waiver Compliance Survey (February 1991).
- o Alaska I/M Programs Analyzer Fair.
- o Fairbanks I/M Program Winter Waiver (Baseline Study) Compliance Survey (October 1991).
- o FY 92 I/M Audit for Alaska I/M Programs.
- o Environmental Impact Studies (EIS) Evaluations.
- o Initiate working relationship with ADOT/PF.
- o Permitting-GVEA Healy Permit.
- o Alaska I/M Program Contingency Plan.
- o Mat-Su Valley I/M Program Design.
- o Proposed I/M Program Regulations.
- o Diesel Fuel Desulfurization Waiver.
- o Draft 1987/1988 Base Year Carbon Monoxide (CO) State Implementation Plan (SIP).
- o Initiate 1990 Base Year CO SIP.
- o Technical Assistance for Local Government
  - Conformity
  - VMT Tracking and Forecasting
  - Transportation Modeling
  - Transportation Control Measures
  - Emission Inventory
- o Maintain National Computer Database AIRS-AFS.
- o Federal CAAA Regulation Tracking.

**Department of Environmental Conservation  
Division of Environmental Quality  
Air Quality Management**

**Permitting/Inspection/Enforcement Group**

Activity Summary:

- o Submitted New Clean Air Act statutes and fiscal notes to the Governor.
- o Completed second quarter tracking reports of Regional and Central Offices permitting, enforcement, and inspection activity.
- o Issued PSD permit to Alyeska for Pump Station 2.
- o Assisted the Pipeline Coordinator Regional Office with several permit application reviews.
- o Assisted the Southcentral Regional Office with several seafood processor permit reviews.
- o Permit review assistance to the regions.
- o Permit application assistance to potential applicants.
- o Participation in the Thursday Brown Bag Luncheon program. Our first presentation looked at the New Clean Air Act.

**Department of Environmental Conservation  
Division of Environmental Quality  
Air Quality Management**

**Air Toxics Group**

Activity Summary:

- o Government Hill - Significant progress toward recommending control technologies for reduction of benzene emissions (VOCs) from the Port of Anchorage petroleum tank farms. Staff has conducted emission inventories, modelled emissions impacts, and conducted ambient monitoring.  
  
Presently studying economics and control effectiveness of various control technologies. Developing a public education program.
- o Valdez Marine Terminal - Involved with the EPA task force developing regulations to control emissions of volatile organic compounds during the loading of crude oil. Regulations are to be proposed this spring.

**Department of Environmental Conservation  
Division of Environmental Quality  
Air Quality Management**

**Ambient Analysis and Air Quality Monitoring Group**

Activity Summary:

- o Completed UNOCAL ammonia monitoring for the 1991 spring-summer season. Detected three eight-hour averaging periods above 3.1 ppm.
- o Completed third and fourth quarter 1991 monitoring System Audits.
- o Conducted seven PSD air quality modelling reviews and three air quality monitoring project plan reviews.
- o Acceptance testing on new monitoring instrumentation.
- o Relocation of air quality lab.
- o Repair and calibration of air quality monitoring equipment.
- o Repair and calibration of air quality audit instrumentation.
- o Third and fourth quarter air quality monitoring data submission to the National "AIRS" databank.
- o Revise woodsmoke control ordinance for Juneau.
- o Revision of the PM-10 State Implementation Plan.
- o Development of an in-situ burn plan for oil spill response.
- o Air quality toxics monitoring for Government Hill tank farm emissions.
- o Air quality monitoring of ammonia emissions from UNOCAL's fertilizer plant in Nikiski.
- o Procurement of new furniture and completed relocation of air quality monitoring lab.
- o Cominco lead audit.
- o Ammonia analyzer testing and comparison study with UNOCAL analyzer.

**Department of Environmental Conservation  
Division of Environmental Quality  
Air Quality Management**

**Ambient Analysis and Air Quality Monitoring Group**

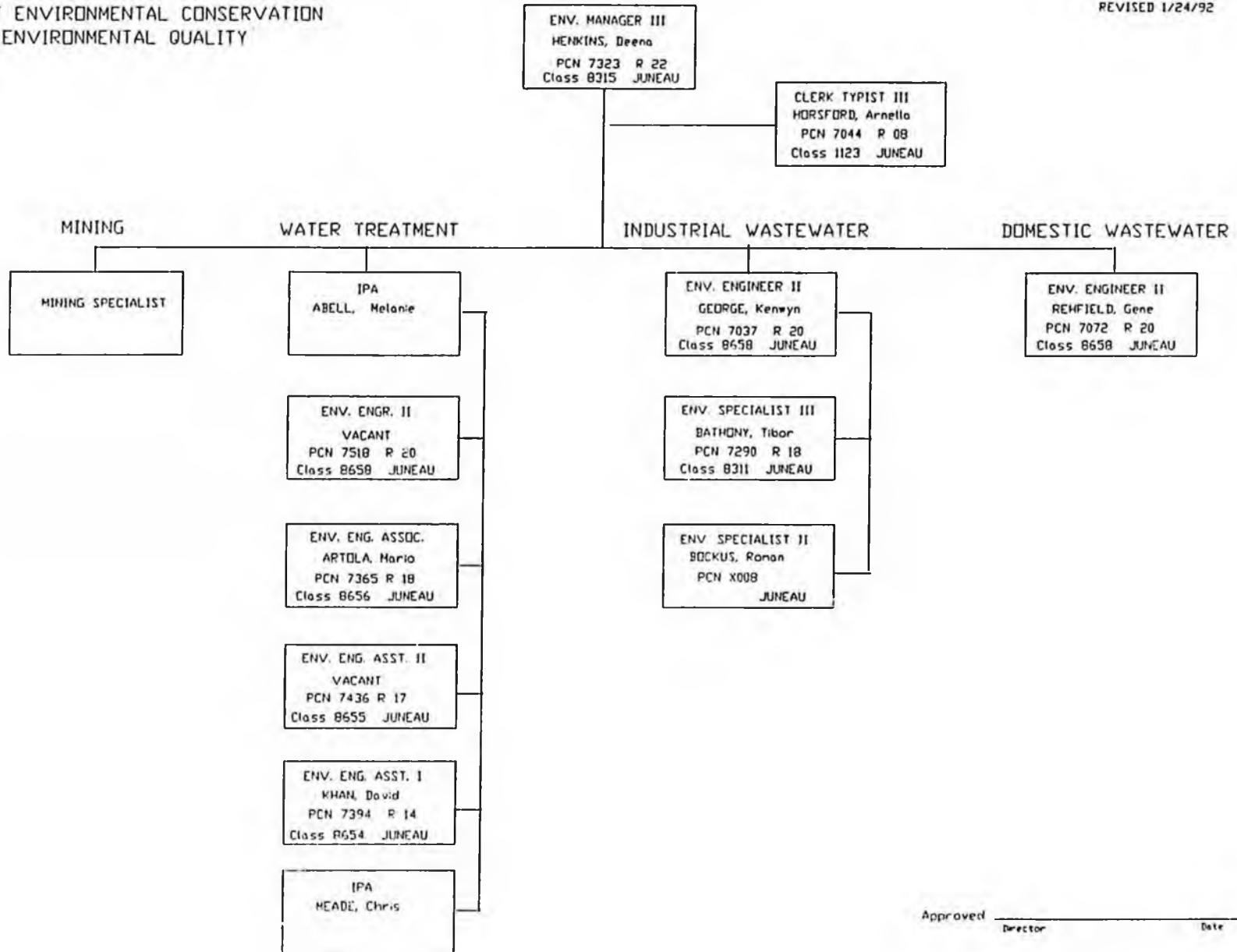
Activity Summary (Continued):

- o First and second quarter 1992 air quality audits.
- o AIRS data submissions.
- o PSD monitoring project plan and air quality modelling reviews.
- o Monitoring instrument calibrations and repairs.

WASTEWATER AND WATER TREATMENT

STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL QUALITY

REVISED 1/24/92



Approved \_\_\_\_\_  
Director Date

**Department of Environmental Conservation  
Division of Environmental Quality  
Wastewater and Water Treatment Management**

**Public Drinking Water Project**

Activity Summary:

- o Maintain regulations that prescribe minimum health standards and procedures for design, construction and operation of Alaska's 2000 public drinking water systems and a database that contains information on each system.
- o Annually inspect over 100 major public water systems, including collecting and analyzing water samples for contaminants.
- o Annually assist designers and review plans for 450 new or modified public water systems to ensure designs meet minimum standards to protect health.
- o Annually respond to 185 complaints about drinking water from consumers, identify contaminants, and specify corrective measures.
- o Review results of water quality testing conducted by public water suppliers, specify corrective measures at 500 cases each year where contamination is indicated, and ensure that suppliers conduct required testing.
- o Work with EPA to negotiate reasonable and workable drinking water regulations that acknowledge conditions unique to Alaska, and secure federal grant funding.
- o Draft State Total Coliform and Surface Water Treatment rules for adoption in FY 93 using input from Ad Hoc workgroups.
- o Assist EPA to implement the federal Total Coliform, Surface Water Treatment, Lead/Copper, and Phase II rules in Alaska until State regulations are adopted.
- o Continue to implement a rural drinking water strategy to assist rural Alaskan water systems in providing safer drinking water.
- o Provide a broad range of assistance to communities and other water system owners, operators, and designers on water treatment processes.

**Department of Environmental Conservation  
Division of Environmental Quality  
Wastewater and Water Treatment Management**

**Industrial Wastewater Control Project**

Activity Summary:

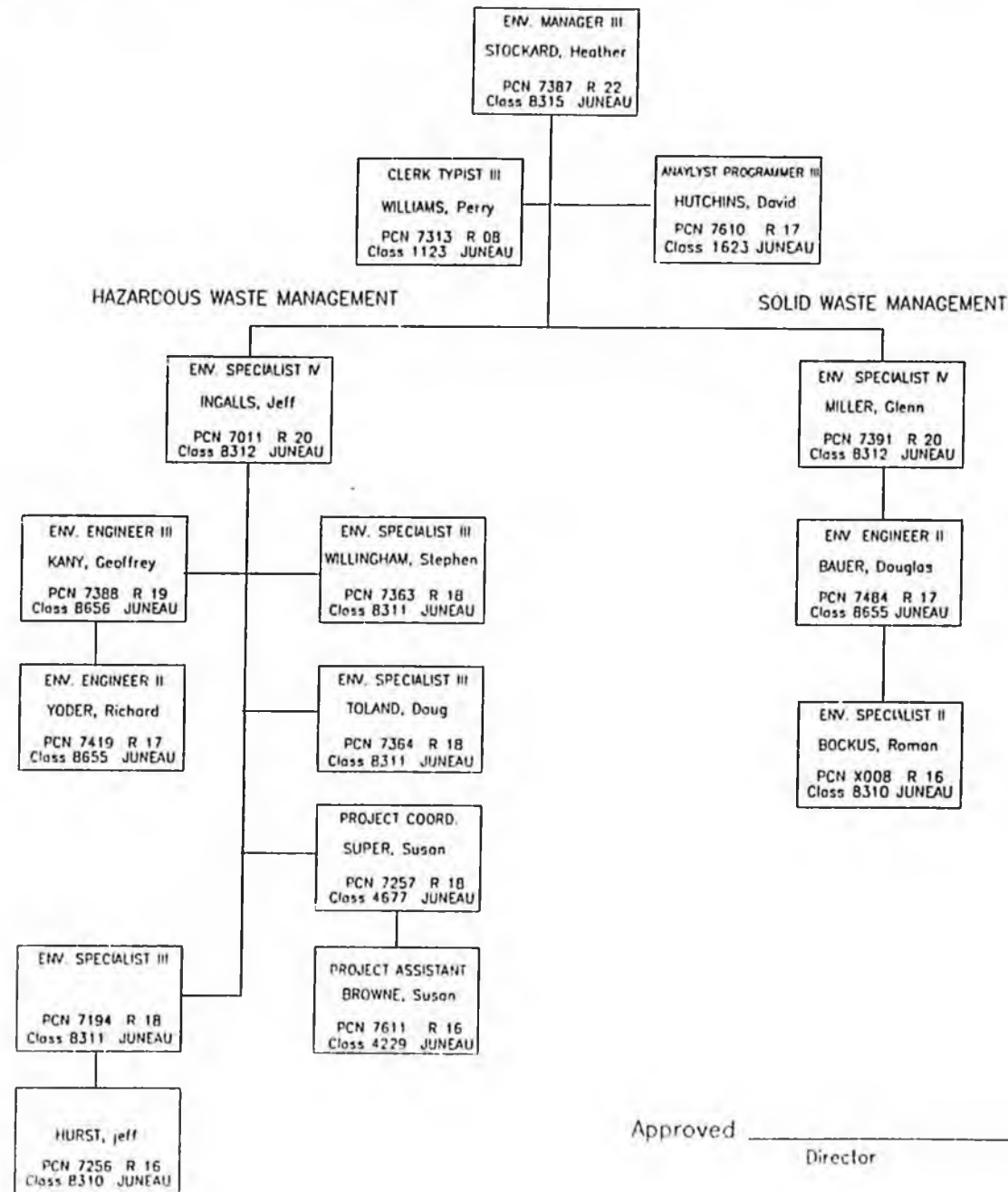
- o Annually review 350 plans for industrial wastewater treatment systems which includes 300 placer mining plans of operation.
- o Annually conduct 250 inspections of industrial wastewater treatment and disposal systems.
- o Annually respond to 400 complaints of inadequate industrial wastewater treatment and disposal.
- o Provide technical assistance to individuals and companies in the design, installation, and operation of industrial wastewater systems.
- o Monitor wastewater system effluent and receiving water quality to ensure that public health and the environment are being protected.
- o Annually certify 25 federal permits for major industrial wastewater discharges to ensure that water quality will be protected.
- o Annually issue 40 State waste disposal permits to minor industrial discharges.

**Department of Environmental Conservation  
Division of Environmental Quality  
Wastewater and Water Treatment Management**

**Domestic Wastewater Control Project**

Activity Summary:

- o Maintain and update the wastewater disposal regulations and guidance.
- o Annually review plans for 1,115 wastewater disposal systems.
- o Annually review plans for 200 subdivisions to ensure adequate means are available to dispose of wastewater.
- o Annually inspect 400 wastewater disposal systems.
- o Annually respond to 800 complaints on inadequate sewer systems.
- o Provide technical assistance to individual companies and municipalities on the design, installation, and operation of domestic wastewater systems.
- o Annually certify 10 federal permits for major sewage treatment systems to ensure that water quality standards will be met.
- o Annually issue 100 State waste disposal permits to sewage dischargers.
- o Turn certification of conventional on-lot systems or existing on-lot systems with no deficiencies over to consulting engineers. Continue to certify 1,200 unconventional or systems with deficiencies so home buyers can secure financing.
- o Investigate and implement viable means of septage treatment and disposal in remote communities.
- o Establish permit issuance guidelines and enforcement procedures, and update a permit database to allow for surveillance of permitted discharges statewide.



Approved \_\_\_\_\_  
 Director Date

**Department of Environmental Conservation  
Division of Environmental Quality  
Solid and Hazardous Waste Management**

**Hazardous Waste Program**

Activity Summary:

- o Continue developing the program's capability to administer the RCRA program in Alaska and obtain RCRA authorization.
- o Continue to maintain and update regulations for proper hazardous waste management and for siting of hazardous waste management facilities.
- o Issue permits with EPA for eight operating hazardous waste storage facilities in Alaska by 1993, including requirements to clean up past releases of hazardous wastes. Issue siting approvals and operating permits for new facilities.
- o Annually inspect 80 of the more than 650 hazardous waste facilities in Alaska that have notified EPA of their hazardous waste activity to determine their compliance with Alaska and federal hazardous waste regulations and permit conditions.
- o Respond to citizen complaints and inquiries involving the improper management of hazardous wastes.
- o Increase compliance with hazardous waste requirements through public education and technical assistance to hazardous waste handlers, compliance monitoring, and corrective action oversight.
- o Prepare appropriate and timely enforcement actions for violations of Alaska and federal hazardous waste management laws and regulations.
- o Continue to address corrective action through permitting and enforcement. Oversee and recommend appropriate corrective action activities to mitigate or correct releases of hazardous waste.
- o Prevent the degradation of the environment by reducing the amounts and toxicity of hazardous wastes generated in Alaska. Continue to emphasize pollution prevention in all hazardous waste activities, including inspections, reporting requirements, household hazardous waste collection, enforcement, and permitting.
- o Ensure that adequate hazardous waste treatment and disposal facilities are available for Alaska's waste.
- o Continue to provide funding to communities in Alaska to assist in their local hazardous waste collection services.

**Department of Environmental Conservation  
Division of Environmental Quality  
Solid and Hazardous Waste Management**

**Hazardous Waste Program**

Activity Summary (Continued):

- o Continue to gather, analyze, and report hazardous waste information for Alaska through the tracking of hazardous waste shipment manifests and required annual facility reports.
- o Initiated the formation of an interagency workgroup to investigate potential hazardous waste management sites in the State, in order to assure that adequate treatment and disposal facilities are available for Alaska's wastes.
- o Helped businesses, government agencies, and the public to better understand State and federal hazardous waste rules, including workshops for auto repair services, dry cleaners, and electroplaters; informational mailouts; technical assistance; and responses to written and telephoned inquiries.
- o Issued a final RCRA permit for container storage to U.S. Army Fort Wainwright, jointly with EPA. Pollution prevention was emphasized in this permit. Continued to work with EPA to issue RCRA permits and to ensure proper closure of facilities that cease managing hazardous waste.
- o Conducted 33 of 40 RCRA Compliance Evaluation Inspections planned for FY 92. Issued 12 Notices of Violation and eight No Violation letters, and prepared six referral cases (five private facilities and one State facility) to EPA. Signed settlements with two facilities and collected penalties for violations of hazardous waste management regulations. Imposed pollution prevention requirements in one of these State compliance orders, above and beyond the penalty.
- o Held public hearings on proposed revisions to Alaska's hazardous waste management regulations (18 AAC 62), drafted responsiveness summary, and submitted regulations for review and adoption. Drafted revisions to the State hazardous waste management facility siting regulations (18 AAC 63).
- o Managed the 1991 Annual/Biennial Reports for all hazardous waste handlers in Alaska to gather data on hazardous waste management and transportation.

**Department of Environmental Conservation  
Division of Environmental Quality  
Solid and Hazardous Waste Management**

**Hazardous Waste Program**

Activity Summary (Continued):

- o Drafted a Memorandum of Understanding (MOU) on the joint implementation of RCRIS and submitted to EPA for review and concurrence.
- o Prepared and signed an agreement with the Department of Law for continuing support on hazardous waste issues, including RCRA authorization, permitting, and enforcement actions.
- o Reviewed comments received from the public in response to the Department's public comment period on the oil and gas exemption for "associated wastes."
- o Continued to work with EPA to coordinate the evaluation and cleanup of hazardous waste releases at facilities in Alaska, and ranked the top 30 facilities by their environmental significance to prioritize corrective action.
- o Initiated cross-media pollution prevention activities, including a workshop for the timber industry, and continued to integrate pollution prevention into program activities.
- o Initiated changes to the annual household hazardous waste collection service, in order to allow new communities to participate.

**Department of Environmental Conservation  
Division of Environmental Quality  
Solid and Hazardous Waste Management**

**Solid Waste Program**

Activity Summary:

- o Maintain regulations that prescribe standards for the collection and disposal of garbage, refuse, and other solid wastes from industrial, commercial, agriculture, and community activities at an estimated 750 landfills, 400 oil and gas drilling sites, and 150 other disposal sites in Alaska.
- o Assist Alaskan communities in improving their local solid waste management and disposal practices and facilities and comply with federal and State requirements, including MARPOL, through education and direct technical assistance.
- o Assist regions and communities in Alaska in determining the most feasible solid waste management and disposal practices by directing studies or making grants to region organizations and communities to study issues of concern.
- o Annually issue permits for approximately 100 solid waste disposal facilities, including municipal landfills, and oil and gas drilling, ore processing, wood waste, and other industrial waste disposal sites.
- o Annually conduct approximately 110 inspections of solid waste disposal sites to determine the operators' compliance with the Department's regulations and permit conditions.
- o Annually respond to approximately 100 citizen complaints involving the improper management or disposal of solid wastes.
- o Prepare enforcement actions for violations of Alaska's solid waste management laws.
- o Monitor and influence the development of proposed federal legislation and regulations for municipal solid wastes, oil and gas drilling wastes, infectious wastes, mining and ore processing wastes, and marine debris, to ensure they properly apply to and benefit the State of Alaska.
- o Completed an assessment of solid waste management options for rural communities on the highway system in Interior Alaska, in Bristol Bay, and on Prince of Wales Island.

**Department of Environmental Conservation  
Division of Environmental Quality  
Solid and Hazardous Waste Management**

**Solid Waste Program**

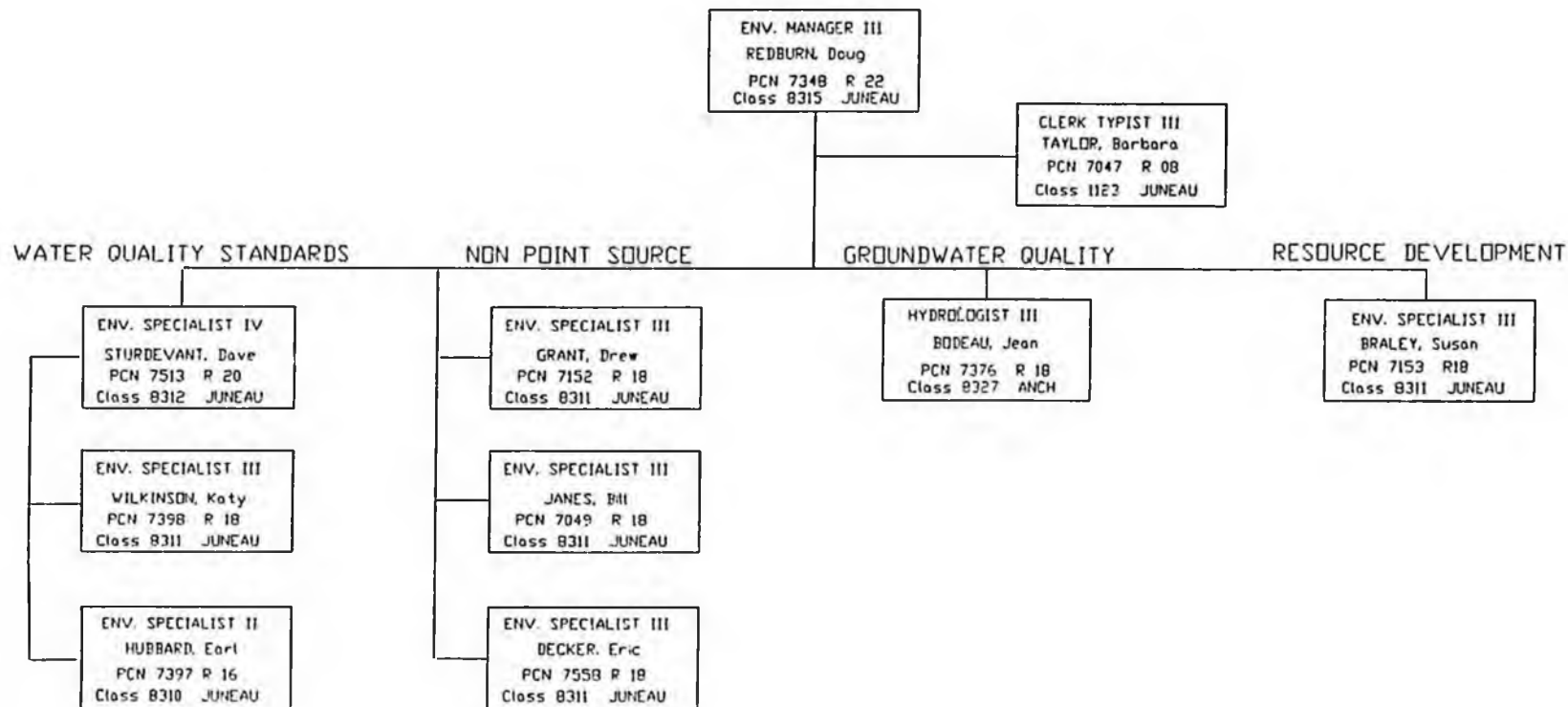
Activity Summary (Continued):

- o Issued and following eight grants for long-range solid waste management planning. Grants total \$300,000 with \$150,00 to be granted out in FY 92.
- o Prepared and issued new procedures and field checklists for landfill inspectors. Adopted a new compliance strategy.
- o Working with oil companies to stop water pollution at old drilling waste disposal sites. Identified responsible parties for old sites. Prepared and distributed site data form to gather site-specific closure information. Issued guidelines for assessing and closing sites.

STATE OF ALASKA  
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 DIVISION OF ENVIRONMENTAL QUALITY

WATER QUALITY MANAGEMENT

REVISED 1/24/92



Approved \_\_\_\_\_  
 Director Date

**Department of Environmental Conservation  
Division of Environmental Quality  
Water Quality Management**

**Water Quality Standards and Planning Program**

Activity Summary:

- o Complete the Triennial Review of the water quality standards to meet federal requirements for setting toxic numeric criteria and assigning human health risk levels for carcinogenic compounds.
- o Provide technical and policy guidance to regional permit staff in the interpretation of water quality standards.
- o Complete a five-year Water Quality Standards Strategy to direct long-term regulatory, research, training, and education initiatives.
- o Complete the 1992 Statewide assessment of the quality of Alaska's surface waters and groundwaters, identifying those waters in violation of water quality standards.
- o Develop an analysis and draft policy to implement the antidegradation policy.
- o Complete a MOU with EPA to establish a process for water quality assessments and total maximum daily load calculations for impaired waterbodies. Initiate project teams within DEC to begin TMDL assessments on selected waters.
- o Propose suggested amendments to the Reauthorization of the Clean Water Act.
- o Provide \$65,000 in local grants to communities and planning entities for water quality monitoring projects.

**Department of Environmental Conservation  
Division of Environmental Quality  
Water Quality Management**

**Nonpoint Source Pollution Control Program**

Activity Summary:

- o Complete water quality revisions to the State forest practices regulations to ensure conformance with the Federal Clean Water Act.
- o Update the Department MOU with the U.S. Forest Service to require increased water quality monitoring and protection on the Tongass and Chugach National Forests.
- o Monitor the effectiveness of best management practices in protecting water quality at 10 logged sites on private and State lands.
- o Review U.S. Forest Service planning documents and conduct 20 field inspections of federal, State and private timber harvest activities.
- o Provide \$65,000 in pass-through grants and contracts to local governments and contractors for improved stormwater controls, groundwater protection, watershed monitoring, and nonpoint source fact sheets and public information and outreach.
- o Complete a "Volunteer Water Watch" Strategy to guide citizen monitoring efforts in urban and rural areas.
- o Organize and help fund citizen water quality monitoring and enhancement pilot projects in two communities during FY 92.

**Department of Environmental Conservation  
Division of Environmental Quality  
Water Quality Management**

**Groundwater Quality Protection Program**

Activity Summary:

- o Coordinate Statewide implementation of the State's Groundwater Quality Protection Strategy (approved in August 1990) and Administrative Order No. 120 to protect groundwater quality.
- o Develop a Department policy on groundwater data management. Organize and convene the Department's groundwater data management committee to address needed improvements in data access.
- o Provide \$40,000 in pass-through grants to communities for local groundwater protection projects.
- o Provide technical assistance and partial funding to groundwater task force activities in Kenai, Mat-Su Borough, Anchorage, and Fairbanks. Provide copies of model groundwater ordinances to local governments.
- o Incorporate groundwater protection principles in signed community agreements with Kenai Peninsula Borough, Mat-Su Borough, Fairbanks, and Municipality of Anchorage.
- o In cooperation with EPA, complete a "profile" of Alaska's groundwater to identify gaps that need to be addressed in FY 93 and beyond to meet federal guidelines for comprehensive groundwater programs.
- o Improve federal facility compliance with the Groundwater Strategy through signed agreements.
- o Conduct a groundwater workshop series in spring 1992 aimed at training local governments in wellhead and aquifer protection approaches.
- o Develop permit writers guidance for wastewater, solid waste, and industrial waste permits and plan reviews.

**Department of Environmental Conservation  
Division of Environmental Quality  
Water Quality Management**

**Coastal Management Program**

Activity Summary:

- o Participate in revisions to the interagency list of permits that go through coastal consistency reviews under 6 AAC 50.
- o Assist in completing revisions to Department oil spill regulations and CZM regulations to strengthen procedures for local district review of oil spill contingency plans.
- o Review and comment on eight local district plans to ensure DEC policy recommendations are addressed in local plans.
- o For coastal projects coordinated by the Governor's Office, ensure regional staff meet comment deadlines 95% of the time. For DEC-coordinated reviews, issue 95% of permits within 55 days.
- o Coordinate the Department's consistency review of the Corps of Engineers' nationwide 404 permit regulations.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Pollution Prevention Office**

**Pollution Prevention Project**

Activity Summary:

- o Provide nonregulatory technical assistance to business, communities, government agencies, and the general public through the DEC Pollution Prevention Hotline and the DEC Pollution Prevention Bulletin (AS 46.06.031).
- o Administer and implement the Hazardous Waste Reduction Matching Grant program (AS 46.03.317).
- o Administer and implement the School Waste Reduction and Recycling Awards program (AS 46.11.070).
- o Administer and implement the Commissioner's Annual Pollution Prevention Award program (AS 46.03.045).
- o Transfer pollution prevention information to Alaskans by fostering cooperative pollution prevention initiatives with Alaskan local governments, businesses, and industry (AS 46.06.031).
- o Develop a long-term plan to provide technical assistance on waste source reduction and recycling to business, government agencies, and the public (AS 46.06.021).
- o Integrate pollution prevention actions into existing DEC pollution control programs and assist other State agencies adopt and implement pollution prevention solutions in their activities (AS 46.06.021 and .031).
- o Administer, implement and monitor federal pollution prevention grant programs received to support statewide pollution prevention efforts (AS 46.06.021).
- o Conduct pollution prevention opportunity assessments for businesses requesting this service (AS 46.06.021).
- o Maintain a pollution prevention technical assistance library and information clearinghouse (AS 46.06.021).
- o Assist the Pacific Northwest Pollution Prevention Research Center identify pollution prevention research needs for Alaskan industry (AS 46.06.031).

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Pollution Prevention Office**

**Pollution Prevention Project**

Activity Summary (Continued):

- o Sponsor and co-sponsor pollution prevention workshops for the public, local governments, and industry (AS 46.06.031).
- o Work with other Pacific Northwest States and EPA to develop regional pollution prevention plans and resolve common pollution prevention issues (AS 46.06.021).
- o Responded to 517 requests for technical assistance from the public, business, and local government.
- o Conducted 18 on-site pollution prevention technical assistance visits to selected industries in the State.
- o Conducted three two-day meetings of the Alaska Municipal Pollution Prevention Roundtable.
- o Participated in, conducted, and/or provided for 17<sup>3</sup> workshops on a variety of pollution prevention topics for Department personnel, the public, local government, and/or business.
- o Developed regulations to implement the School Waste Reduction and Recycling Awards program (AS 46.11.070) and currently implementing the program.
- o Developed and currently implementing the Hazardous Waste Reduction Matching Grant program (AS 46.03.317).
- o Developed and currently implementing the Commissioner's Annual Pollution Prevention Award program (AS 46.03.045).
- o Published the 46-page Pollution Prevention Resource Guide to provide the public with general pollution prevention information.
- o Prepared four pollution prevention assessment reports for selected businesses.
- o Published the quarterly DEC Pollution Prevention Bulletin--a pollution prevention newsletter.
- o Participated on the Northwest Regional Pollution Prevention Roundtable and the National Roundtable for State Pollution Prevention Programs.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Pollution Prevention Office**

**Pollution Prevention Project**

Activity Summary (Continued):

- o Administered one RSA with the University of Alaska to deliver pollution prevention training programs.
- o Administering two contracts to provide pollution prevention technical assistance and conduct the Alaska Municipal Pollution Prevention Roundtable.
- o Negotiated an agreement between DEC and the Alaska Support Industry Alliance to develop and deliver a pollution prevention project for the support industry.
- o Established a cooperative grant agreement with the Pacific Northwest Pollution Prevention Research Center to identify research needs for fish processing, oil gas, and paper and pulp industries in Alaska.
- o Assisted the Governor's Office secure \$270,000 in federal funds to expand awareness and interest in the Anchorage Chamber of Commerce Green Star Program. Participate on the Governor's Waste Reduction and Recycling Task Force.
- o Developed, under cooperative agreement with Alaska Health Project, community-based pollution prevention guidance documents for the North Slope Borough and the Kodiak Island Borough, and a three-credit waste reduction engineering school curriculum.
- o Assisted with implementation of pollution prevention managers symposium to identify opportunities to integrate prevention into DEC programs.
- o Establishing a DEC pollution prevention managers steering committee to identify Department opportunities for pollution prevention.
- o Monitoring Regional Office implementation of Pollution Prevention Office work plans.
- o Secured federal funds to support pollution prevention training initiative for local governments.

## COMMUNITY AGREEMENT STATUS REPORT

Steve Haavig 789-3151

Page 1

COMMUNITY	DEC Community Contact Person	Community Contact Person	Initial Draft	In-house Draft	Commun. Review	AG Review	Target Date	Comments
1. Ketchikan Gateway Borough	Barry Hogerty	Ralph Bartholomew	✓	✓	✓	✓	✓	SIGNED 4-91
2. Ketchikan, City	Barry Hogerty	Ted Ferry	✓	✓	✓		1-31-92	Draft complete
3. Saxman, City of	Barry Hogerty	Dick Shields	✓	✓	✓		7-1-92	Draft complete
4. Sitka, City and Borough of	Jim Clare	Stuart Denslow	✓	✓	✓		4-1-92	Draft complete
5. Petersburg, City of	Jim Clare	D. A. Coon	✓	✓	✓		4-1-92	Draft complete
6. Haines, City of	Al Kegler	Walt Wilcox	✓	✓	✓	sent		Draft complete
7. Haines, Borough of	Al Kegler	Fred Shields	✓	✓	✓			
8. Klawock, City of	Barry Hogarty	Marvin Yoder						Initial contacts made
9. Thome Bay, City of	Barry Hogerty	Ginny Tierney						Initial contacts made
10. Kake, City of	Barry Hogerty	Lonnie Anderson	✓				2-92	Contacts made, DEC sent letter in Sept.
11. Skagway	Al Kegler	Tom Healy	✓	✓	✓		7-1-92	Draft completed
12. Craig, City of	Barry Hogerty	Tom Briggs	✓	✓	✓		12-92	Council rejected draft agmt
13. Juneau, City and Borough of	Al Kegler	Kevin Ritchie	✓				2-92	Scoping letter sent in Sept.
14. Angoon, City of	Jim Clare	George Johnson, Sr.	✓				7-1-92	Scoping letter sent in Sept
15. Wrangell	Barry Hogarty	George Ebes	✓	✓			12-92	Draft completed, in-house/community reviewing
16. Tenakee Springs	Al Kegler							

COMMUNITY AGREEMENT STATUS REPORT

Steve Haavig 789-3151

COMMUNITY	DEC Community Contact Person	Community Contact Person	Initial Draft	In-house Draft	Commua. Review	AG Review	Target Date	Comments
17. Southeast Conference Regional Partership Agreemt.	Dick Stokes	James Kohler	✓				7-1-92	Draft being reviewed by DEC

## COMMUNITY AGREEMENT STATUS REPORT

Priscilla Wohl: 563-6529

Page 1

COMMUNITY	DEC Community Contact Person	Community Contact Person	Initial Draft	In-house Draft	Commun. Review	AG Review	Target Date	Comments
1. Unalaska	Bruce Erickson	Polly Prochler	✓	✓	✓	✓	✓	SIGNED 4-23-91
2. Sand Point, City of	Bruce Erickson	Bob Juettner	✓	✓	✓	✓	✓	SIGNED 4-4-91
3. St. Paul, City of	Bruce Erickson	Larry Mercurief	✓	✓	✓	✓	✓	SIGNED 4-91
4. Kenai Peninsula Borough	Les Buchholz	Dick Troeger	✓	✓	✓	✓	On hold	Borough Attorney reviewing draft
5. Whittier, City of	Bill Lamoreax	Rhonda Gaul	✓				1-1-92	Developing initial draft
6. Chenega Bay	Jane Tonkin	Darrell Totemoff	✓	✓	✓		12-1-91	Final draft completed
7. Tatitlek	Jane Tonkin		✓	✓	✓		12-1-91	Final draft completed
8. Kodiak, Borough	Arnie Shyrock	Jerome Selby	Target 11-15				1-1-92	Developing initial draft
9. Kodiak, City of	Arnie Shyrock	Bob Brodie	Target 11-15					Developing initial draft
10. Scammon Bay	Priscilla Wohl	Bruce Kasayali	Target Jan 1, '92					Developing initial draft
11. Unalakeet	Jim Patterson	Bob Foote						Developing initial draft
12. Anchorage, Municipality of	Priscilla Wohl	Dept. heads	Target Jan 1, '92					Developing initial draft
13. Bristol Bay Borough	Bruce Erickson/ Priscilla Wohl	Cynthia Osborne						Est. contacts
14. Cordova City of	Jane Tonkin	Nancy Gross	✓	✓	✓		12-1-91	Final draft completed
15. Dillingham	Bruce Erickson/ Priscilla Wohl	Joe McGill						Est. contact & interest
16. Valdez, City of	Paul Pinnard	Lynn Chrystal	✓					Developing initial draft



Alaska Department of Environmental Conservation

NORTHERN REGIONAL OFFICE

COMMUNITY AGREEMENT STATUS REPORT

Paul Bateman: 451-2102

COMMUNITY	DEC Community Contact Person	Community Contact Person	Initial Draft	In-house Draft	Commun. Review	AG Review	Target Date	Comments
1. Tanana Chiefs Conference	Doug Dasher	Mike Herring	✓	✓	✓	✓	✓	SIGNED 8-21-91
2. Fairbanks, City of —City of Fairbanks —Fairbanks North Star Bor —City of North Pole	Doug Dasher	Wayne Nelson Jim Sampson Carleta Lewis	✓	✓	✓	✓	✓	SIGNED 10-10-91
3. Northwest Arctic Borough	Randy Romonesko	Nathan Kotch	✓	✓	✓		12-31-91	Draft completed, in-house/ community reviewing
4. Kotzebue, City of	Randy Romonesko	Nathan Kotch	✓	✓	✓	✓	✓	SIGNED 11/14/91
5. White Mountain, City of	Randy Romonesko	Tom Gray	✓	✓	✓	✓	✓	SIGNED 10-25-91
6. Nenana, City of	Doug Dasher	Steve Bainbridge	✓	✓	✓	Sent to AG	11-13-19	Ready to be signed
7. North Slope Borough	Scott Home	Jeslie Kalcak	✓	✓	✓		12-31-91	Ready to be signed
8. Denali Borough	Doug Dasher	Rick Brewer	✓	✓			2-92	In-house draft completed

**ENVIRONMENTAL QUALITY MONITORING  
& LABORATORY SERVICES**

STATE OF ALASKA  
DEPARTMENT ENVIRONMENTAL  
CONSERVATION  
DIVISION OF ENVIRONMENTAL QUALITY

**CHEMIST V**  
  
GRABBE, Rolly  
PCN 7075 R 22  
Class 8335 Juneau

**CLERK TYPIST III**  
  
MAC PHAIL, Deanna  
PCN 7418 R 8  
Class 1123 Juneau

**ADMIN ASST I**  
  
VACANT  
PCN 7124 R 12  
Class 1912 Juneau

**CLERK TYPIST III**  
  
VACANT  
PCN 7414 R 8  
Class 1123 Juneau

**LABORATORY SERVICES**

**MONITORING**

**QUALITY ASSURANCE**

**TOXICOLOGY**

**CHEMIST IV**  
  
LOVE, Alan  
PCN 7067 R 20  
Class 8334 Juneau

**ENV SPECIALIST IV**  
  
MOCK, Jeff  
PCN 7118 R 20  
Class 8312 Juneau

**CHEMIST IV**  
  
VACANT  
PCN 7066 R 20  
Class 8334 Juneau

**CHEMIST III**  
  
RIRNELBAUER, Linda  
PCN 7058 R 18  
Class 8333 Juneau

**CHEMIST II**  
  
FREEMAN-WITTIG, M.J.  
PCN 7413 R 16  
Class 8332 Juneau

**CHEMIST II**  
  
LAFARA, Don  
PCN 7297 R 16  
Class 8332 Juneau

**ENV SPEC III**  
  
BLEICHER, David  
PCN 7123 R 18  
Class 8311 Juneau

**CHEMIST III**  
  
JODVALIS, Clara  
PCN 7475 R 18  
Class 8333 Fairbanks

**CHEMIST I/II**  
  
JOSE, Reynaldo  
PCN 7345 R 14  
Class 8331 Juneau

**CHEMIST II**  
  
CLOVER, David  
PCN 7119 R 16  
Class 8332 Juneau

**ENV SPEC III**  
  
WILLIAMS, Dick  
PCN 7059 R 18  
Class 8311 Juneau

**CHEMIST II**  
  
PEDERSEN, Kurt  
PCN 7416 R 16  
Class 8332 Juneau

**ENV TECHNICIAN II**  
  
HATHAWAY, Simone  
PCN 7403 R 12  
Class 8302 Juneau

**ENV SPEC III**  
  
HARDESTY, Joan  
PCN 7412 R 18  
Class 8311 Fairbanks

**CHEMIST II**  
  
REDDY, Paul  
PCN 7074 R 16  
Class 8332 Juneau

**ENV LAB TECHNICIAN**  
  
VACANT  
PCN 7417 R 12  
Class 8303 Juneau

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Chief's Office**

Activity Summary:

- o Supervision of eight positions which include the laboratory supervisor, monitoring supervisor, NRO and SCRO quality assurance specialists, toxicologist, administrative assistant, clerk typist, and a college intern.
- o Provide oversight of new lab building contract. Review technical specifications against materials and equipment provided by contractor. Make recommendations for acceptance or rejections of alternate proposals of materials. There are a number of lawsuits with the contractor that I will help the State in preparation of its offense and defense, besides dealing with the contractor on a daily basis keeping things running and getting things to work according to the bid requirements.
- o Perform data review of Department, Alyeska, and Alyeska contractor chemical data associated with the ballast water treatment plant, tanker ballast water, sediment and water chemistry in Port Valdez, and NPDES permit. I personally review all the GC/MS data we acquire with these projects.
- o Act as the State's chemistry certification authority for the drinking water program. I work closely with Clara Jodwalis, the NRO quality assurance specialist, in the certification process, review of labs' performance on bi-annual water supply performance evaluation samples supplied under EPA contract, and in the wording of the letters sent to labs concerning their certification status. Clara is a chemistry certification officer who performs on-site audits of the labs and makes recommendations for the certification status of labs based upon the audit and their performance on the performance evaluation samples.
- o Act as the Department's quality assurance officer. The duties for this position were originally in PCN 18-7058 that was first downgraded by revised program to a Chemist III quality assurance position and then was converted to the toxicologist position. I keep in contact with EPA personnel to stay current on quality assurance activities and set policy for the Department. I assist in preparing quality assurance plans for various programs and have helped with all the plans associated with the Alyeska Pipeline Terminal work. I rewrote the quality assurance plan for the Juneau Lab.
- o Provide quality assurance training to Department staff. I have given quality assurance training to the Regional and District Offices in Valdez, Soldotna, Anchorage, Juneau, and Fairbanks.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Chief's Office**

Activity Summary (Continued):

- o Review dioxin data. I have reviewed most of the Department's data on dioxin analyses associated with sampling at KPC and APC. These are highly technical analyses performed using high resolution mass spectrometry detection systems coupled to gas chromatographs.
- o Assist in writing regulations. I provide assistance in writing regulations where chemical analyses or chemical criteria are involved.
- o Organizing a laboratory accreditation program for chemistry labs that will parallel the drinking water certification program but will serve all programs besides drinking water. This will require reviewing the chemistry laboratories' quality assurance plans, performing on-site audits, preparing and distributing performance evaluation samples, and reviewing overall performance and then determining appropriate accreditation status based on the above criteria.
- o Establish regulations and structure for collecting program receipts. Regulations have to be in place before my section can begin collecting program receipts for the drinking water certification and other program lab accreditation. Fees will be collected for applications, quality assurance plan reviews, preparation and distribution of performance evaluation samples, review of data, travel and per diem for on-site audits, correspondence, and other associated activities.
- o Answer technical questions about chemistry and analytical chemistry from the Department, other agencies, and the public.
- o Help manage the professional laboratory analytical services contract to contract overflow analytical work from the Juneau Lab.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Quality Assurance**

Activity Summary:

- o Reviewed and approved 45 Department quality assurance project plans for data collection activities. Will approve about 30 more Statewide before the end of June.
- o Reviewed and recommended for approval 30 Underground Storage Tank (UST) quality assurance program plans for contractors.
- o Wrote regulations for chemistry portion of UST regulations.
- o Performed field audits of six UST sites.
- o Maintained certification status for seven in-state chemistry drinking water labs and 15 out-of-state labs by reciprocity certification. Certified one new in-state lab. Performed on-site audits at two in-state labs.
- o Audited Alyeska Pipeline Terminal chemistry lab.
- o Will perform on-site audits of four drinking water labs and at least four labs performing UST analyses.
- o Will present quality assurance training course to Department staff in April in Juneau Lab.
- o Reviewed chemistry data for Department program staff for contract compliance and wrote usability summary reports for about 10 data packages.
- o Provided technical assistance in chemistry and quality assurance to about 60 public requests for assistance.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Toxicology**

Activity Summary:

- o Incumbent plans to begin work February 24.
- o Will perform risk assessments in support of Department programs.
- o Will be Department's expert on toxics and will maintain resource library and databases on toxic materials.
- o Incumbent will be focal point with the EPA on risk assessments and on toxics.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Laboratory Group**

Activity Summary:

Estimated Sample load, first half of FY 92.

- o Drinking Water VOC Survey--1380 samples.
- o Drinking Water Gross Alpha Survey--130 samples.
- o Drinking Water Miscellaneous--90 samples.
- o Service City--159 samples.
- o Ballast Waters--90 samples.
- o Miscellaneous Small Spills--90 samples.
- o Water Quality Monitoring--176 samples.
- o Hazardous Waste including LUST--150 samples.

Estimated Sample Load for remainder of FY 92

- o VOC Survey--1380 samples.
- o Ballast Water--60 samples.
- o Water Quality Monitoring--176 samples.
- o Miscellaneous Drinking Water--90 samples.
- o LUST--100 samples.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Monitoring Group**

Activity Summary:

- o Juneau Streams Project: Conducted water quality assessments on 18 Juneau streams identified as impaired or suspected of being impaired. This project serves as a model for future water body assessments conducted under EPA 305(b) guidelines.
- o Eyak Lake Project: Planned and conducted summer sampling on Eyak Lake in Cordova to assess water quality on a water body with multiple uses, in support of Nonpoint Source 319 funding.
- o Pelican Outfall Project: Planned and conducted fall sampling of a sewage treatment plant outfall and receiving waters in Lisianski Inlet and coordinated DEC Dive Team activities. At the request of the Division of Facility Construction and Operation, information will be used by DEC and EPA in permit renewal for a 301(h) waiver.
- o Gold Creek Project: Completed the draft report for the Gold Creek Water Quality project in relation to the reopening of the AJ Mine by Echo Bay.
- o Alaska Water Watch Technical Support: Provided continuing technical support to the Alaska Water Watch Program Miller House pilot project through both human and technical resources. Field activities were implemented and laboratory instruction was provided.
- o EPA Rapid Bioassessment Protocol Evaluation: Field evaluations of several bioassessment techniques were conducted on Duck Creek and Auke Nu Creek in Juneau, and a draft written report was prepared.
- o Kasilof River Water Quality Project: The final report was prepared for a year-long water quality study of the Kasilof River on the Kenai Peninsula, funded by a 205(j) grant.
- o Juneau Backloop Coliform Investigation: Planned, conducted, and prepared a final report on water quality associated with failing septic systems in the vicinity of the Backloop Road in Juneau.
- o Provided monitoring support to the Division of Spill Prevention and Response for the investigation of the Meier's Lake and Tetlin fuel spills in the Northern Region.
- o Complete the Monitoring Quality Assurance Program Plan.

**Alaska Department of Environmental Conservation  
Division of Environmental Quality  
Environmental Quality Monitoring & Laboratory Operations**

**Monitoring Group**

Activity Summary (Continued):

- o Prepare a final report for the Juneau Streams Project.
- o Complete field work and prepare a final report for the Eyak Lake project.
- o Initiate and prepare a final report for the Channel Drive Coliform Study in Juneau.
- o Continue to provide Water Watch program technical support.
- o Purchase SLAT equipment and prepare to initiate field work for the SLAT Study this summer.

**Department of Environmental Conservation  
Division of Environmental Quality**

**1992 and Beyond**

There is a recognition within the Department of Environmental Conservation that the next decade will record unprecedented growth in public concern over the environment. This concern will manifest itself in many ways. Principal among these (and of particular impact to the Department) will be the passage of a large new body of environmental law. Concurrent with this will be the steady "ratcheting down" of enforcement processes associated with existing law. At the national level deferment and exemption will be replaced with compliance schedule and enforcement.

The next several pages outline how the Division of Environmental Quality (EQ) plans to meet these challenges. To accomplish this, EQ will proceed with eight major initiatives. Some of these are long-standing, such as State primacy of federal programs, while others, such as pollution prevention and Community Agreements, are new.

Broadly stated these initiatives are:

- o State primacy
- o Community Agreements
- o Research and Development
- o Decentralization
- o Privatization
- o Pollution Prevention
- o Quality Control/Quality Assurance Programs
- o Risk Assessment and Inspection and Enforcement Strategies

**State Primacy:**

It is the State's long standing position that Alaskans are better served with local implementation and management of federal environmental law (commonly referred to as "State Primacy"). EQ intends to aggressively maintain current primacy programs and work toward additional assumptions in Hazardous Waste and Wetlands management.

**Research and Development:**

The Department has set a goal to dedicate a meaningful portion of its annual budget to research and development projects. Utilizing a prioritizing process, funding will be identified within existing EQ programs to finance the research and development (R&D) program. Through the creation of a Research and Development Management Committee, the division will identify projects within each program that are candidates for R&D money. These proposals will then be submitted to the DEC Commissioner for review and approval.

### **Decentralization:**

EQ will continue to support decentralization through an ongoing review and prioritizing process. To accomplish this task, EQ has embarked on a division-wide assessment of all programs. Included within this assessment is task analysis, role delineation, program tracking (task and budget), training, field personnel certification, Quality Control/Quality Assurance, audit process, uniformity standards, communication protocol, etc. All of this activity is designed to move as much work as is possible to the Department's field level organizations or communities while still maintaining program integrity across Alaska's wide varying regional conditions. In addition, it is designed to establish a highly ethical system of environmental oversight where policy and field-level personnel work together to maintain the highest possible standards of accountability and quality work products.

### **Privatization:**

All programs under the purview of EQ will be reviewed with the intent of identifying as many candidates as possible that are available for contracting and privatization. This activity will be ongoing through the year, but will receive special attention early in the yearly budget cycle. Utilizing procedures similar to those discussed earlier in the R&D section, a management committee composed of EQ Section Chiefs will review all programs for contracting/privatization opportunities. Programs so identified will be prioritized and submitted to the DEC Commissioner for review and approval. These opportunities will be viewed on a statewide basis in coordination with the regional and district staffs.

### **Pollution Prevention:**

Firmly believing that pollution prevention is the key to solving many of the State's most difficult environmental problems, EQ will aggressively continue implementation of the ongoing Pollution Prevention program. Additional staff and budget will be added to both the Central Office and the Regional Offices. Personnel at all levels in the program will work extensively with communities, special interest groups, corporations, and schools/universities to identify and act upon pollution prevention initiatives.

### **Quality Control/Quality Assurance Programs:**

All programs under the purview of EQ will have Quality Assurance/Quality Control (QA/QC) procedures incorporated into every aspect of the program. These QA/QC procedures will cover programs on a statewide basis and will be accompanied with both training and audit elements. The program will be formalized and take into consideration all aspects of permitting, monitoring, records keeping, and work certification procedures (certification standards will apply to DEC personnel as well as contractor personnel, private laboratories, and professional licensing organizations). The design and placement of QA/QC programs will lie with central, regional, and

district managers and staff. Once in place, long-term management will rest with the QA/QC coordinator within EQ's Central Office.

### **Inspection and Enforcement Strategies:**

Education, pollution prevention, and cooperative efforts to identify and solve problems are important steps in the State's inspection and enforcement strategy. The Department will continue forming partnerships to accomplish these and related enforcement practices.

There is a recognition within the division that environmental law (along with mandated increases in monitoring, data gathering, and reporting protocols) will continue to be generated at both the national and State levels at unprecedented rates for the foreseeable future. There is also a recognition that these increased requirements will come at the same time as ever mounting pressure to reduce the cost and size of government. In an attempt to reconcile these two powerful and divergent realities, the Division of Environmental Quality will embark upon a dual program of Risk Assessment and Strategies for Inspection and Enforcement (I&E).

Both risk assessment and enforcement and inspection strategies are long-standing and accepted procedures utilized within both the public and private sectors for dealing with workloads beyond resource capabilities. Simply put, Risk Assessment is a formalized process whereby a broad spectrum of activities are reviewed and prioritized in their order of potential risk to human health and the environment. I&E strategies generate a systematic process for why, where, and when to apply scarce field resources to best accomplish human health and environmental protection.

Risk assessment and I&E programs will be systematically generated for each program within EQ. During the creation of these program proposals extensive input from the Regional and District Offices will be sought and factored into the process. Before any program proposals are implemented, they will be presented to the DEC Commissioner for his review and approval.

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION

John A. Sandor  
Commissioner



## Division of Facility Construction and Operation

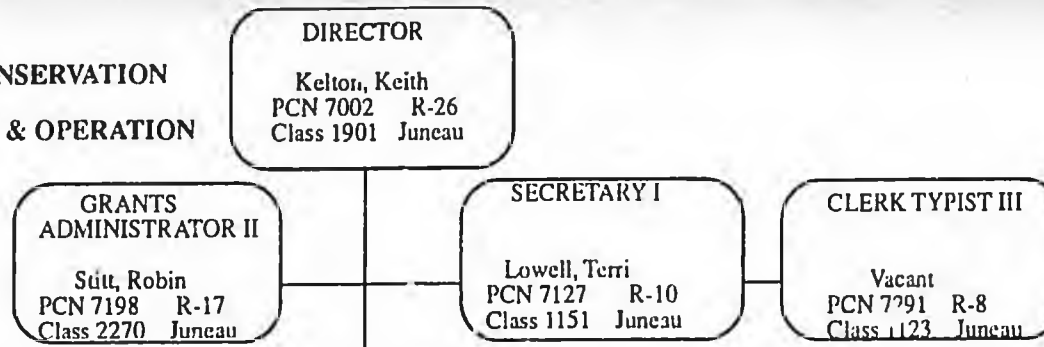
### Program Overview

Prepared for  
Senate Resources Committee

January 27, 1992

STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF FACILITY CONSTRUCTION & OPERATION

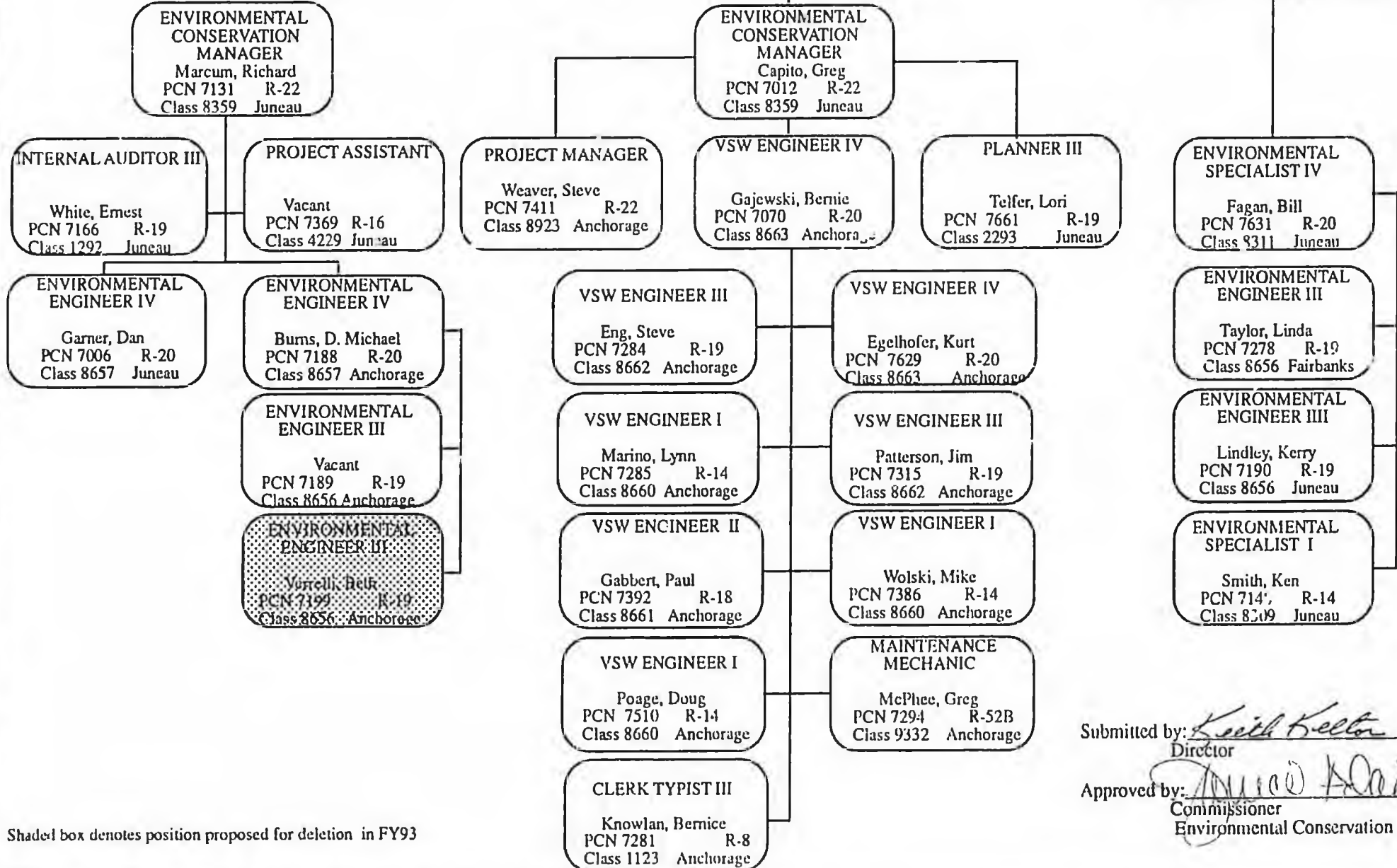
E-1  
January 22, 199



**MUNICIPAL GRANTS**

**VILLAGE SAFE WATER**

**OPERATIONS ASSISTANCE**



Shaded box denotes position proposed for deletion in FY93

Submitted by: *Keith Kelson*  
Director

Approved by: *David Blair*  
Commissioner  
Environmental Conservation

## FACILITY CONSTRUCTION AND OPERATION PROGRAM OVERVIEW

The Facility Construction and Operation BRU administers three programs: Municipal Grants and Loans, Village Safe Water, and Operations Assistance. The goal of the Division is to provide water, sewerage, and solid waste facilities which will improve sanitation and protect the health and well-being of Alaska's residents. The construction of facilities, combined with the training and certification of system operators, will decrease the potential for public health hazards, protect the environment, and safeguard the State's investment in capital expenditures. A brief description and the major issues associated with each program are presented below.

**VILLAGE SAFE WATER (VSW)** - This program provides up to 100 percent of project costs to villages for sanitation improvements. Unincorporated villages with populations of 25-600 or second class cities are eligible for grants. These grants generally provide a safe water source at a central location, a place to dispose of honeybucket wastes, and, in some cases, laundry, sauna, and shower facilities. The VSW engineer assists the community by acting as the "city engineer." Additionally, this program develops proposals and secures Federal Indian Set-Aside funding for planning, design and construction of wastewater treatment facilities in Alaskan villages.

**MUNICIPAL GRANTS AND LOANS** - This program provides grants for up to 50 percent of the nonfederally financed costs for water, sewerage, and solid waste improvements. These grants are used to pay for engineering, construction, legal, administrative and equipment costs. Grants are available only to incorporated municipalities. The program has funded over 575 projects in 45 communities since 1970. This program also administers federal funds for construction of sewerage facilities. Administration of these funds is governed by the Clean Water Act and regulations promulgated by the U.S. Environmental Protection Agency (EPA). The State has been delegated authority from EPA to administer the federal funds. The program also administers the Alaska Clean Water Fund. Through the fund, communities may receive low interest loans for planning, design, and construction costs associated with water, sewerage, and solid waste management projects.

**OPERATIONS ASSISTANCE** - This program provides training and certification to increase operator competence. The need to develop a continuing training program is essential. The program consists of a combination of 1) hands-on training by Department personnel; 2) contracted workshops in central locations; and 3) a lending library of audio-visual materials, books, and correspondence courses. This program also administers the Remote Maintenance Worker Program. The Department was directed, in FY 86, to begin charging for training classes. A user fee system has been implemented.

RMW GRANT FUNDING HISTORY & PLAN

<u>Fiscal Year</u>	<u>Bristol Bay Boro</u>	<u>Yukon Kuskokwim</u>	<u>Tanana Chiefs</u>	<u>Norton Sound</u>	<u>Southeast Regional</u>	<u>Maniilaq</u>	<u>TOTAL</u>
FY 82	\$ ---	\$150.0	\$ ---	\$ ---	\$---	\$ ---	150.0
FY 84	100.0	100.0	---	186.0	---	---	386.0
FY 85	100.0	100.0	180.1	182.0	---	---	562.1
FY 86	70.0	100.0	150.0	186.0	---	---	506.0
FY 87 (Auth)	92.16	56.16	151.68	154.6	---	---	454.6
FY 87 (Rev)	78.36	47.7	128.93	126.2*	---	---	381.19
FY 88	72.0	72.0	144.0	72.0	72.0	72.0	504.0
FY 89	100.0	72.0	186.0	78.0	72.0	77.0	585.0
FY 90	88.7	74.0**	162.0	72.9	70.0	70.2	537.8
FY 91	88.7	134.2**	162.0	72.9	70.0	70.2	598.0
FY 92	111.2	200.4	207.0	95.4	92.5	92.7	799.2
FY 93 Request	111.2	205.4	216.1	100.4	97.5	107.7	838.3

\* 28.3 was transferred from the RMW authorized grant to the Environmental Sanitarian Program in the NSHC.

\*\*FY 90 grant and 1st qtr. of FY 91 grant were to Coastal Yukon Mayor's Conference

The State of Alaska and the U.S. Public Health Service have invested more than a half billion dollars in rural Alaska villages to provide safe drinking water and sewage disposal. Today, the dedicated efforts of eight remote maintenance workers protect this investment in 107 rural villages, through six regional health corporations.

Started by the Alaska Legislature in 1981, the remote maintenance worker program provides skilled assistance to communities to keep their water and sewer systems running, and to provide on-the-job training for local operators. When emergencies occur, the remote maintenance workers respond.

The successes of the Remote Maintenance Worker Program so far have been phenomenal.

Only one community with access to a remote maintenance worker has suffered a catastrophic failure of a water or sewer system, and the failure happened when the health corporation was without an RMW and was in the process of hiring a new worker.

For every dollar spent on remote maintenance, the State saves an estimated 10 dollars in capital investment each year. The efforts of remote maintenance workers operating on a shoestring budget save an estimated \$7 million worth of capital investments annually.

In the last decade, the state and federal governments have helped build water and sewer systems in rural Alaska that have reduced disease and death. These systems range from the simple -- a central well from which villagers can haul water to their homes -- to the complex. Regardless of the system, however, the equipment requires maintenance, or it will not work or last.

While eight remote maintenance workers currently provide training to local operators, turnover of village personnel is high and, as yet, few have the mechanical skills necessary for boiler maintenance, pump repairs or troubleshooting electrical control panels. We have made progress in this training, but we can't relax without losing ground.

The Remote Maintenance Worker Program was begun because village governments -- which are responsible for operation and maintenance of water and sewer systems -- lacked the funds or experienced personnel to do the job.

Now a few communities are setting up fee systems to pay for operating and maintenance costs, but most villages lack the cash resources or tax base to take this step. This leaves the responsibility to volunteers who require training.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
STATUS SUMMARY  
FY92 CAPITAL BUDGET MUNICIPAL GRANTS PROJECTS

<u>COMMUNITY</u>	<u>SCOPE OF PROJECT</u>	<u>AMOUNT</u>	<u>STATUS</u>
Anchorage	Merrill Field Landfill	\$ 593,510	Under Design
	Regional Landfill	301,490	Under Design
	Various Water/Sewer	2,005,000	Not yet applied for. Expect designs in late winter.
Bristol Bay Borough	King Salmon Sewerage Facility	1,500,000	Plans & specs. approved. Award soon.
Cordova	Sewer System Upgrade	300,000	Construction completed, in one year performance period.
Fairbanks	Sewer and Water Projects	1,000,000	Not yet applied for. Expect design in Early Spring.
Haines	Wastewater Facility	1,000,000	Under Design.
Juneau	Channel Drive Sewer System System	900,000	May move to Back -Loop.
Kenai	Sewage Treatment Plant Upgrade.	250,000	Under Construction. Fifty percent complete.
Kenai Pen. Borough	Soldotna Solid Waste Facility	900,000	Under Construction.
Ketchikan	Sewage Treatment Plant Upgrade	520,000	Ninety-five Complete.
Nome	Wastewater Treatment Plant	1,330,000	Under Construction.
Unalaska	Water Project		Seventy percent Complete.
		<u>1,000,000</u>	
		\$11,600,000	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 STATUS SUMMARY  
 FY92 CAPITAL BUDGET VILLAGE SAFE WATER PROJECTS

**WATER PROJECTS**

<u>COMMUNITY</u>	<u>SCOPE OF PROJECT</u>	<u>AMOUNT</u>	<u>STATUS</u>
Angoon	Tillinghast Lake Water Development	\$1,280,000	Construction Complete May, 1992
Chefornak	Water upgrade	2,147,500	Planning
Deering	Water upgrade	1,998,400	Design
Eck	Well drilling	22,500	Planning
Gambell	Piped water Phase I	2,800,000	Construction Continue into 1992
Golovin	Water progressive Plan	427,300	Planning
Goodnews Bay	School water treatment	50,000	Planning
Hooper Bay	Water upgrade	990,000	Planning
Mt. Point	Water project	2,524,000	Construction into 1992
Kokhanok	Water improvements	200,000	Planning
Koyuk	Piped water	1,200,000	Planning/Design
Nikiski	McGahan water	150,000	Ready for Bid
Nikolai	Piped water	500,000	Construction Complete in 1992
Noorvik	Water upgrade	200,000	Construction in 1992
Selawik	Water plant upgrade	200,000	Design
Statewide	Clinics/water connection	500,000	Planning/Design
St. Michael	Water tanker/fire truck/appurtances	300,000	Construction
Togiak	Water	257,000	Design
Tyonek	Water Phase II	<u>742,000</u>	Planning
		\$16,488,700	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
STATUS SUMMARY  
FY92 CAPITAL BUDGET VILLAGE SAFE WATER PROJECTS

**SEWERAGE PROJECTS**

<u>COMMUNITY</u>	<u>SCOPE OF PROJECT</u>	<u>AMOUNT</u>	<u>STATUS</u>
Alakanuk	Honey Bucket Haul	\$ 305,000	Planning
Anderson	Septage Disposal Facility	300,000	Design
Bethel	Wastewater Treatment System Improvements	623,000	Design/ Construction in 1992
Chalkyitsik	Water/Sewer/Dump Site Study	25,000	Planning
Chevak	Sewer Upgrade	300,000	Planning
Chignik	Sewer Upgrade/ Drainfield Replacement	180,000	Planning
Glennallen	Sewer System	1,200,000	Construction in 1992
Huslia	Sanitation Improvements	500,000	Construction Complete
Ketchikan Gateway Bor.	Mt. Point Water & Sewer Project	2,524,000	Construction in 1992
Klukwan	Lagoon	194,500	Design
Kotlik	Honey Bucket Cleanup	50,000	Planning
Kotzebue	Sewer Main Rehab	870,000	Construction in 1992
Stebbins	Honey Bucket Access Road	38,000	Construction
Talkeetna	Eastside Sewer and Water	2,000,000	Construction
Thorne Bay	Sewer Project	550,000	Construction in 1992
White Mountain	Water and Sewer	<u>617,000</u>	Construction in 1992
		\$10,276,500	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
STATUS SUMMARY  
FY92 CAPITAL BUDGET VILLAGE SAFE WATER PROJECTS

**SOLID WASTE PROJECTS**

<u>COMMUNITY</u>	<u>SCOPE OF PROJECT</u>	<u>AMOUNT</u>	<u>STATUS</u>
Birch Creek	Solid Waste Removal and Relocation	\$ 10,000	Planning
New Stuyahok	Water Sewer and Solid Waste	477,000	Planning
Tuluksak	Water, Sewer and Solid Waste Study	50,000	Planning
Unalakleet	Solid Waste	<u>1,414,000</u>	Construction in 1992
		\$1,951,000	

A black and white illustration of a water tap on the left side of the page. A single drop of water is falling from the tap's spout and landing on a map of the state of Alaska. The map is shaded to show its geographical features, including the Aleutian Peninsula and the Alaska Peninsula. The background is a textured, stippled grey.

# A COMMITMENT TO ALASKANS

*Prepared by:*

*The Department of Environmental Conservation*

*John Saylor, Commissioner*

*Walter Hickel, Governor*

**DRAFT**

*Solving Today's Sanitation Problems  
While Planning for the 21st Century*

**"A Commitment to Alaskans" is a working document meant to lay the foundation for a more refined plan in the future. As such, the Department would like to solicit public and agency input regarding information contained in this draft as well as any additional information or ideas which could be of assistance in this planning effort.**

**Additionally, an Interagency Task Force is being formed to act as a catalyst for advancing and refining the goals, strategies and objectives outlined on the following pages. If you are interested in participating in one of the Task Force's working groups, please let us know.**

**Please address all comments/ideas to:**

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**As Alaska looks to the future and a growing population, it is essential that we strive to provide sanitation services which protect the public health of our residents and provide a foundation for economic development opportunities.**

**It is the goal of this Administration that no Alaskan be deprived of the quality of life afforded by the provision of water, sewerage, and solid waste services.**

DRAFT: JANUARY 7, 1992

## OVERVIEW

**Without adequate water, sewerage, and solid waste facilities, the vitality of Alaska's communities is hampered, public health threatened, and opportunities for economic development severely restricted.**

**As the State looks towards the twenty-first century, it is critical that we commit to an efficient, well planned approach to providing these public services to all Alaska.**

**This document offers a strategy for formulating a systematic approach to addressing the water, sewerage, and solid waste needs of Alaska's communities. It presents recommendations for maximizing the efficiency of current sanitation systems and optimizing future capital project investments. As a long-term management proposal, goals are outlined and action strategies presented for review.**

**This is a working policy document meant to lay the foundation for a more refined implementation plan.**

## **A BLUE PRINT FOR SOLVING ALASKA'S SANITATION NEEDS**

### **FUNDAMENTAL GOAL:**

It is the goal of this administration that no Alaskan be deprived of the quality of life afforded by the provision of adequate water, sewerage, and solid waste services.

### **STRATEGY:**

To achieve this goal, a five point management strategy is recommended.

- Develop a Comprehensive Interagency Approach to Problem Solving.
- Adhere to a Stable Six Year Funding Commitment.
- Six Year Capitalization of the Alaska Clean Water Fund.
- Promote a Solid State/Federal/Community Partnership.
- Enhance the State's "Insurance Policy" Programs (Training & Technical Assistance).

### **TIME FRAME:**

If the recommendations outlined in this plan are effectively implemented, water, sewerage, and solid waste services will be provided in every Alaskan community by the year 2010. Intermediate steps may be required to achieve the final level of service.

**Due to the distinct demographic and economic conditions as well as the diverse sanitation needs of Alaska's urban and rural communities, two separate plans for implementing the State's overall sanitation management strategy are required.**

**The first plan, outlined on pages \*\* through \*\*, is a strategy for addressing the sanitation needs of the State's urban communities. The second plan, which begins on page \*\*, presents recommendations for solving the water, sewerage, and solid waste problems in rural areas. These plans are intended to stand alone and may, therefore, contain some redundancy.**

**Under each plan, management goals are presented followed by action strategies for goal advancement.**

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**GOALS AND STRATEGIES FOR  
SOLVING THE  
SANITATION NEEDS  
OF  
URBAN ALASKA**

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## The Sanitation Needs of Urban Communities are Dramatic.

### AGING FACILITIES

The immediate and long term need for increasing the availability of funds for urban water, sewer, and solid waste management projects is dramatic. During the next twenty years, it is estimated that a minimum of \$1 billion will be needed to plan, design, construct, expand, upgrade, replace, and rehabilitate sanitation systems in the State's incorporated municipalities.

The majority of urban water, sewerage, and solid waste facilities in place today were constructed between 1973 and 1985 at a cost which exceeded \$750 million. Since the average useful life of these facilities is 15-20 years, it is projected that there will be a major demand for system replacement between 1992-2005. The exact extent of these replacement costs is not yet known, however, due to inflation and a variety of other economic factors, costs will exceed the first round investment.

### POPULATION GROWTH

Alaska is the second fastest growing State in the nation and its highest growth rates have traditionally been concentrated in incorporated communities. The population in many of these communities has already increased beyond the design capacity of their sanitation systems and system overload has become a serious problem. This increased burden on a treatment facility shortens its useful life and can result in inadequate treatment, recurring system malfunctions, or a complete system breakdown. New facilities need to be constructed or old facilities expanded to accommodate the growing population of these communities.

In addition to replacing aging systems and accommodating population growth, local governments will soon be faced with meeting new federal drinking water and solid waste standards. Complying with these new standards will require a major investment in extensive system upgrades for many communities.

### NEW DRINKING WATER REQUIREMENTS

The federal government has recently redefined safe drinking water requirements. The fiscal impact of the new standards is currently under review. It is known, however, that a major investment will be required to bring systems into compliance with new surface water filtration and lead/copper rules.

### NEW SOLID WASTE REQUIREMENTS

Due to the expense of upgrading landfills to meet new federal requirements, many cities will likely opt to close their landfills and build new ones. This will not be cheap. A recent study for the Juneau landfill, for example, estimated closure costs of approximately \$10 million. When constructing new facilities, communities will be required to meet federal design standards which will necessitate a substantial expenditure.

## GOALS

The following goals have been identified as cornerstones to addressing the sanitation needs of urban Alaska:

- Maximize limited State revenues through an equitable division of State and local financing alternatives.
- Promote a State/Community partnership approach to problem solving.
- Assist communities protect public health and attain/maintain compliance with State and federal requirements.
- Develop a systematic approach to meeting community facility rehabilitation and replacement needs.
- Formulate an effective strategy for meeting population growth needs and ensuring adequate sanitation services are provided throughout urban Alaska.

Four Action Strategies are recommended as solid practical steps toward achieving these goals:

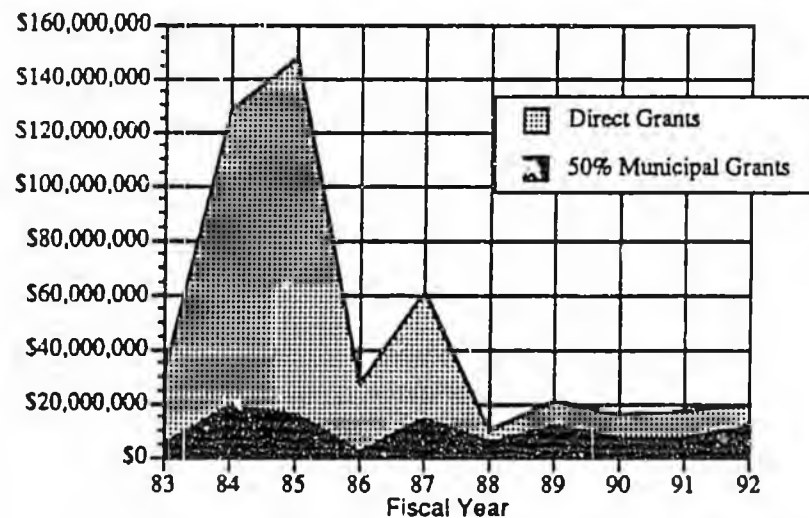
- Stabilize funding for sanitation infrastructure.
- Optimize the State's investment in sanitation facilities.
- Promote State/Community partnerships
- Develop a planning database.

## **ACTION STRATEGY: Stabilize funding for sanitation infrastructure.**

A stable and predictable funding commitment for the construction of sanitation facilities is necessary to achieve the goal of adequate sanitation services in every Alaskan community.

As shown in the graph below, State funding of community sanitation facilities has been sporadic at best. When State revenues were high, it was relatively easy for local governments to obtain grants. However, as oil revenues declined so did the State's investment in these projects. The unpredictable nature of this "boom and bust" funding cycle has made planning for long term capital improvements virtually impossible for local governments. In fact, there have been instances where communities were successful in receiving State funding for the planning, design and the first construction phase of a project, but have not received financial assistance for the phases necessary to complete the project.

State Funding History of Sanitation Projects\*



\* excluding projects funded through Village Safe Water

By committing to a stable Municipal Matching Grants budget, the State and local governments would be able to plan for and finance public sanitation projects in a more effective and efficient manner.

Likewise, by capitalizing the Alaska Clean Water Fund loan programs, the State would provide Alaska's urban communities with a predictable, perpetual and, eventually, self-sustaining financial resource (as describe in objective 2 of the next Action Strategy).

**ACTION STRATEGY:****Optimize State investment sanitation infrastructure.**

It is estimated that well over \$1 billion will be needed to finance sanitation infrastructure in incorporated cities and boroughs during the next twenty years.

This demand greatly exceeds limited State and local revenues. It is therefore vital that we: (a) provide a financially prudent, long term strategy to solve sanitation needs and (b) stretch and leverage every dollar spent on sanitation infrastructure to the greatest extent possible.

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**Objective 1** Obtain State match for leveraging federal capitalization of the Wastewater Loan Program.

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Since 1972, Alaska communities have relied upon federal wastewater grants to partially fund their larger, more complex wastewater treatment and collection systems. However, in 1987 Congress phased out the 15 year old grant program and replaced it with state administered revolving loan funds. This action marked the beginning of a new era in financing wastewater projects. The Federal Wastewater Loan Program was the State's response to this change in national direction.

As part of its FY 93 budget request, the Department will pursue an appropriation of \$1.6 million as its final capitalization request for the Federal Wastewater Loan Program. This appropriation will fulfill the State's matching requirements for capturing all remaining federal "seed" monies (\$23 million) earmarked for the program.

*After State Fiscal Year 1993, State appropriations will not be required to keep the program operating. It will be self-sustaining through loan repayments and will have the resources available to offer an average of \$9.3 million in loans per year for community wastewater projects.*

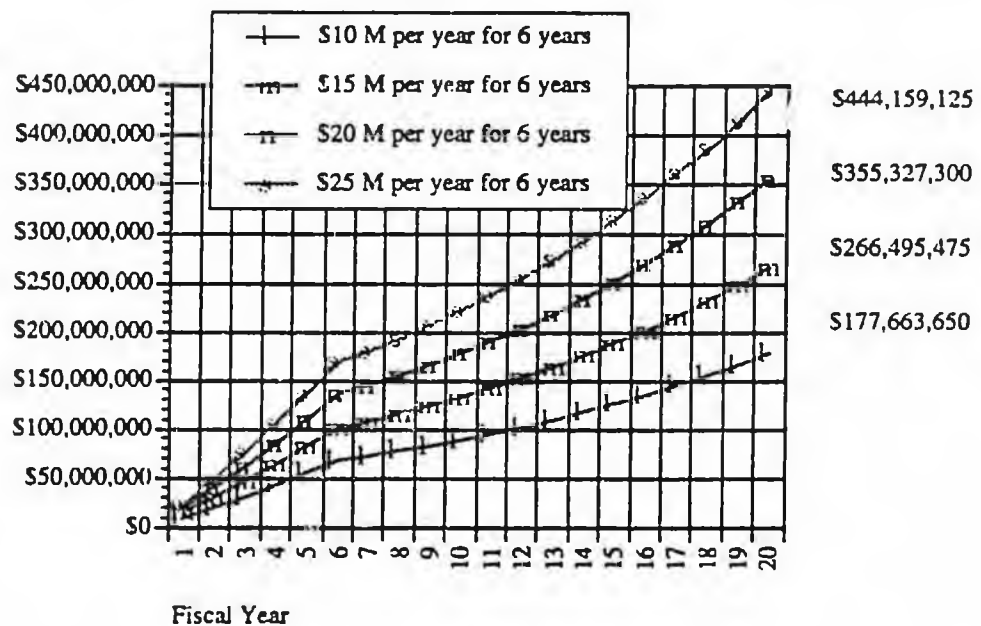
## Objective 2 Capitalize the State Construction Loan Program.

For the next six years, the Department plans to request an appropriation to the State Construction Loan Program as part of its capital budget submission. Due to the large demand for financial assistance from this loan program (last year alone, community requests exceeded \$95 million), a minimum capitalization of \$10 million per year for six years is recommended. At this level, over \$177.7 million in sanitation projects could be financed over twenty years.

If revenues are available, a more aggressive six year capitalization commitment is recommended.

### AN ENDOWMENT FOR THE FUTURE.

The graph below compares the value of new projects which could be financed through the State Construction Loan Program over a twenty year period under four capitalization scenarios, where \$10, \$15, \$20 and \$25 million are appropriated each year for six years.



Under Scenario 1, the State capitalizes the fund at the rate of \$10 million per year for six years. This commitment level would allow the fund to finance \$177,663,650 worth of projects over a twenty year period.

As the capitalization level increases under the remaining three scenarios, the number of projects that can be funded over a twenty years and the average return to the revolving fund increase proportionately. Under each scenario the State would realize more that a 225 percent return on its initial investment after 20 years.

## How would the program work?

Like any revolving loan program, a specific amount is appropriated to capitalize the fund. These monies are then loaned to communities for a specific purpose—in this case, to plan, design and construct water, sewerage, and solid waste management projects. Once a project is completed, communities have one year to collect user fees or assessments before they begin repaying the loan. As monies are repaid, they are reloaned to finance additional projects. In this way, the fund continually recycles its assets. The cycle is perpetual, funds keep revolving, and a continually greater number of projects are constructed from the "seed" monies appropriated to capitalize the fund.

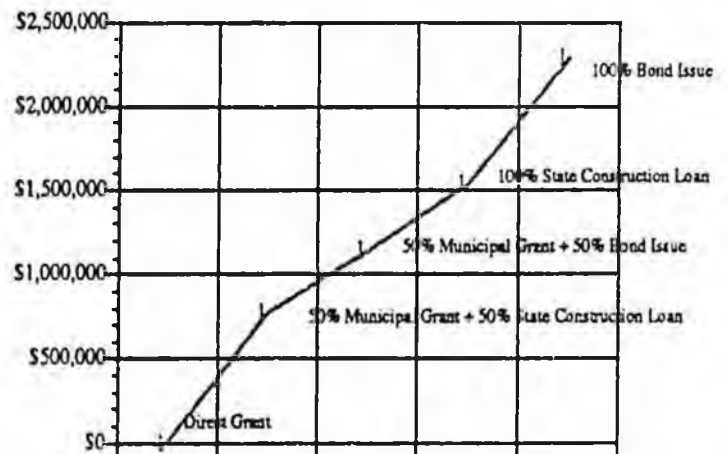


(insert graphic = overview of loan fund concept)

The program's financing terms are attractive. Communities may receive low interest loans through the program for up to 100 percent of costs associated with water, sewer, and solid waste projects. Interest rates are based on two-thirds of the Municipal Bond Index rate at the time a loan is made. Over the last two years, this has equalled an average interest rate of 4.5 percent. Loan repayment periods may be up to twenty years.

Although most of the State's larger communities can afford to repay a loan for 100 percent of a projects costs, some of the smaller cities do not have the population or economic base to repay a large loan. For these communities an equitable solution is a grant/loan mix. This "package" approach could be accomplished by combining State Construction Loans with Municipal Matching Grants.

A strategy to assess the appropriate grant/loan mix for these communities will be pursued as part of the Department's on-going planning effort. This effort will require analysis of several factors on a community-by-community basis including current user charges, operation and maintenance expenses, community population, per capita income, and the availability of various local revenue streams which could be dedicated to loan repayment.



Cost to Community to Construct a \$1 Million Project Under 5 Funding Options

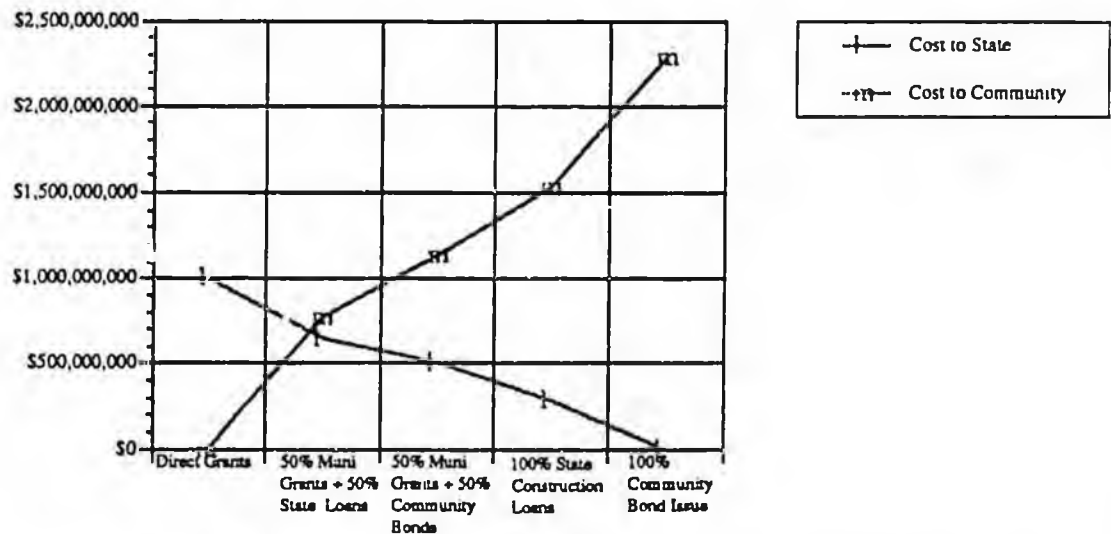
### Objective 3 Promote an equitable solution to capital project financing.

Addressing the water, sewerage, and solid waste needs of the State's urban communities is estimated to cost in excess of \$1 billion over the next 20 years. Unfortunately, local governments and the State have limited financial resources. So the question arises ... how will the planning, design and construction of these projects be financed?

The State can not do it alone. Revenues are declining and demands on budgets are already burdensome. Neither can communities afford to finance multi-million dollar projects. There are few revenue streams which local governments can dedicate to sanitation facility construction. Residential user fees are already steep in most communities and are earmarked for system operation, maintenance, and replacement costs.

The Department recommends an equitable division of financial responsibility between the State and local governments. The graph below compares the costs to communities and the State to construct \$1 billion in projects over the next twenty years under five financing mechanisms: State Direct Grants, State Construction Loans; Municipal Bonds; Municipal Grants combined with State Construction Loans; and a 50/50 Municipal Grant/community bond combination.

Comparison of cost to communities and the State to Construct 1 Billion in projects over the next 20 years under 5 financing alternatives



As shown above, the most equitable division of financial responsibility between the State and local governments would be provided by combining Municipal Grants and State Construction Loans. The grant/loan ratio could be changed based upon a community's financial capabilities. This approach is used in many States throughout the U.S. where grant/loan blends for water and sewer projects are based upon what is called an ability to pay index.

## **Objective 4    Increase funding through the Municipal Grants Program**

The Department proposes a Municipal Grants capital budget commitment of \$12 million per year for the next six years to help communities defray a portion of their water, sewer, and solid waste costs. The program leverages community participation on a dollar for dollar basis, so the reach of each dollar appropriated as a municipal grant is doubled when compared to direct grants. Since it has been proven that the success of a project depends on local participation, the Department will work to persuade local governments and the legislature to utilize the program as the State's primary grant mechanism for sanitation projects in larger communities. To assist cities and boroughs finance the local share of their project costs, low interest State Construction loans and Federal Wastewater loans will be offered. After capitalization of the Alaska Clean Water Fund, reliance on Municipal Grants as a funding mechanism will gradually decrease.

## **Objective 5    Establish a policy specifying the conditions under which Direct Grants may be used as a funding alternative.**

In order to increase the efficiency of limited State revenues, it is recommended that Direct Grants only be used when communities (a) do not have the population or economic base to repay a low interest loan or to provide the match requirements of the Municipal Grants program, (b) have the proven managerial capability to administer a grant; (c) have in-house technical experts to oversee planning, design, and construction activities related to the project; (d) are willing to provide at least 10% of project costs or the equivalent in in-kind services; and (e) have proven the capability to operate and maintain a facility.

## **ACTION STRATEGY:**

### **Promote a State/community partnership.**

It is essential that community participation in a project go beyond signing a grant offer or passing a resolution. It is equally vital that the State's role transcends simply disbursing payments. Experience has shown that communities who actively work with the State and participate in the solution to their sanitation problems are more likely to adequately operate and maintain their facilities.

#### **Objective 1 Local commitment to participate in funding.**

Requiring a local funding commitment not only ensures that projects are a community priority, it also increases community interest in operating and maintaining projects in which they have made a financial investment. Historically, the matching requirement of the Municipal Grants program has been the catalyst for this commitment in urban communities. Now, the Alaska Clean Water Fund loan programs are also available to assist all urban communities participate in project costs.

#### **Objective 2 Cooperative planning.**

A successful project requires adequate and cooperative planning. Without planning, resources may not be available to complete construction; a community may get a project which is different from what they wanted; the facility constructed may not be feasible, practical, or the most cost effective alternative available; and the cost of operating and maintaining the system may be too expensive for the community. It is, therefore, vital that both local residents and individuals with experience and expertise are part of the planning team. Project cost estimates must be accurate or construction could be halted prior to completion. Public hearings should be held frequently during planning to ensure the community gets what it wants and has the information necessary to choose the most cost effective, feasible, and practical project alternative.

Cooperative Planning between communities and the Department is an integral part of successful projects. It is a requirement of Municipal Grants, Federal Wastewater Loans, and State Construction Loans.

#### **Objective 3 Operation and maintenance.**

In addition to a commitment to properly operate and maintain their facilities, funding for sanitation projects should be conditioned upon a local commitment to (a) hire operators certified at a level commensurate with the technical complexity of the facility, and (b) require operator participation in refresher courses and skill advancement training.

The Department will provide assistance for addressing these requirements by (a) ensuring communities are aware of operation and maintenance costs associated with a project prior to construction, (b) assisting communities to calculate user fees sufficient to finance operation and maintenance costs, and (c) by offering training, technical assistance, and certification programs for system operators.

**ACTION STRATEGY:****Develop an inventory database for use as a planning tool.****Objective 1 Conduct a statewide survey of the existing facilities in incorporated cities and boroughs.**

The Department will conduct surveys of incorporated cities and boroughs to develop a computerized inventory of the existing level of sanitation services provided in each community.

**Objective 2 Ascertain the rehabilitation, replacement, and expansion needs of each community.**

The Department will work with Municipalities to inspect their water, sewer, and solid waste facilities to document the condition of each and to ascertain rehabilitation, replacement, upgrade, and expansion needs. This information will be entered into the State's data base and will be used as an intricate component of an ongoing planning effort to assist communities in financing and constructing needed system improvements in the most systematic and efficient manner.

**Objective 3 Examine the financial capability of each community.**

Using information obtained from communities, the State Department of Labor, and the U.S. Census Bureau, the financial capabilities of each incorporated city and borough will be evaluated to determine the most equitable method of financing their sanitation needs. Economic variables which will be included in the assessment will include per capita income, current user fees, population base, average household size, bond rating, and extent of the community's outstanding debt.

**Objective 4 Develop a 20 year analysis of community sanitation needs.****Objective 5 Develop a comprehensive long range facility funding plan.**

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**GOALS AND STRATEGIES FOR  
SOLVING THE  
SANITATION NEEDS  
OF  
RURAL ALASKA**

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## Providing Adequate Sanitation Services is Crucial to the Vitality, Public Health, and Economic Growth of Rural Alaska.

As Alaska looks to the future and a growing population, it is essential that we strive to provide services which protect the public health of our rural residents and lay a foundation for economic development opportunities.

Adequate water, sewerage, and solid waste services are cornerstones to realizing these goals.

As the twenty-first century nears, citizens in over half of the State's rural communities do not have piped water or flush toilets. Over ninety percent of the sewerage facilities in rural Alaska have been assessed by the federal government as inadequate. State and federal agencies have estimated the costs of providing acceptable sanitation facilities in every rural community to be \$1.2 to \$1.3 billion. These are startling statistics and they highlight the magnitude of the problem.

Without adequate water and sewerage facilities, personal hygiene is difficult, if not impossible. The lack of facilities to properly dispose of human waste, combined with insufficient quantities of safe water often result in threats to public health. Village residents experience a number of waterborne and communicable diseases which could be avoided if means to support improved personal hygiene and safe drinking water were available.

The provision of acceptable sanitation services is often a prerequisite to economic development and growth. However, many villages lack these basic facilities. Numerous rural communities, for example, are unable to attract the seafood processing industry because their water and sewerage facilities do not meet standards required to support the industry. Likewise, the full potential of the tourism business may not be realized in rural Alaska since even the most seasoned traveler would prefer to visit an area where safe drinking water and flush toilets are available and refuse is consolidated out of sight. Another example of an economic development opportunity which demands sanitation infrastructure is port development. To attract shoreline businesses, not only do our ports and harbors need adequate docks and breakwaters, but adequate water and sewer are also critical. Under MARPOL, coastal communities must also provide solid waste facilities in order to engage in marine commerce, yet adequate facilities are not available in many of our more promising rural ports.

One of the indicators often used to measure the quality of life in a community is the public service infrastructure provided to residents. Carrying a sloshing bucket of human waste to pitch in a pond or hauling water from a watering point would not be acceptable to the vast majority of Americans, yet many rural Alaskans contend with these hardships daily. Providing water, sewerage, and solid waste services to every community by the year 2010 will allow all Alaskans to experience the quality of life taken for granted throughout the rest of the nation and much of the world.

PUBLIC  
HEALTH

ECONOMIC  
DEVELOPMENT

QUALITY  
OF LIFE

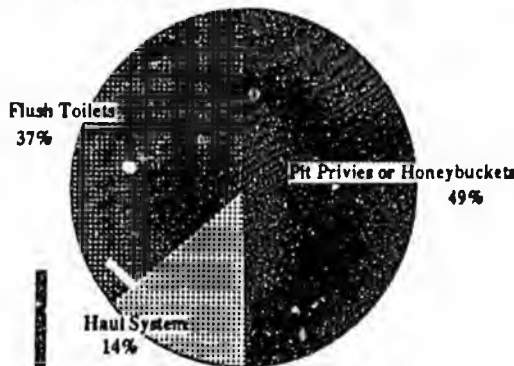
## CURRENT SANITATION CONDITIONS

Considerable progress has been made in constructing water, sewerage, and solid waste systems in rural areas, however, much remains to be done. Currently, approximately 40 percent of the State's rural communities provide piped water to residents' homes and only 37 percent have flush toilets.

### WASTEWATER

Sewage disposal methods in 63 percent of the State's villages are substandard to flushing toilets. Fourteen percent of the State's rural communities operate a **sewage haul system**. This basic collection/disposal service consists of residents hand-hauling filled honeybuckets to mobile dumpsters located throughout the community. The dumpsters are then hitched to a vehicle and hauled to a lagoon or pond for disposal. Forty-nine percent of Alaska's villages have service levels which are frequently compared to those in third world nations. These methods consist of **pit privies** and **individual honeybucket haul**. With the individual honeybucket haul method, a bucket serves as a toilet. Plastic garbage bags are used as a liner for the bucket. As the bucket fills, residents lift the plastic bag and its contents out of the bucket and hand carry the bag to a bunker, lagoon, tundra pond, landfill or, too frequently, undesignated dumping areas located within the residential area.

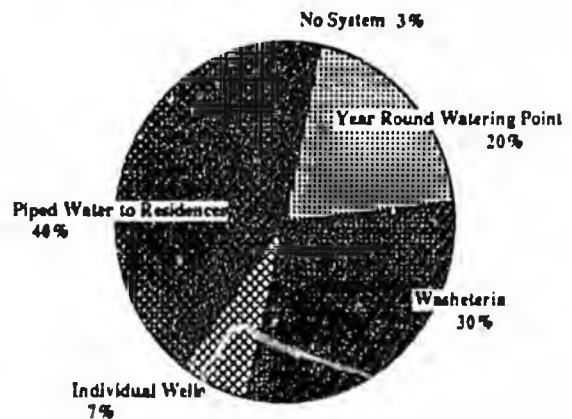
EXISTING WASTEWATER SERVICE LEVELS IN RURAL ALASKA



Water systems in rural Alaska vary greatly in complexity and service level. Approximately 40 percent of Alaska's villages provide residents with piped water; 30 percent own and operate a community **washeteria**; and 20 percent operate year round **watering points** which may vary from several spigots located throughout the village to a single building from which potable water is dispensed and hand carried by residents to their homes. In the remaining 10 percent, a community water system is not in place and water is collected **individually** by residents either from individual wells (7%) or from ice, streams, creeks, or by rain catchment (3%).

### WATER

EXISTING WATER SERVICE LEVELS IN RURAL ALASKA



## A CALL TO ACTION.

After twenty years of trying to address the sanitation needs of rural Alaska, it is clear there are no quick fix solutions. This plan seeks to develop a new current approach to problem by defining feasible solutions.

The problem is multifaceted. First, our current selection process for determining which projects will receive grant assistance is short-sighted. Too often the State's annual sanitation funding plan is thrown together during the closing days of the legislative session based upon political criteria rather than need. A long term, stable funding approach has not been available.

Second, it has become clear that technology alone will not address the water, sewerage, and solid waste needs in rural Alaska. Competent operators, adequate user fees, proper accounting, and the support of a well managed community government are equally vital components to solving sanitation problems.

Third, demographic, economic, and climatic conditions make sanitation system construction and operation in rural Alaska among the most expensive and technically challenging in the world. Yet little research has been conducted to develop alternatives to expensive and complex piped systems capable of providing an equal level of service.

Finally, a long term strategic approach to solving rural sanitation needs has never been formulated. Rather, planning has been limited to a one year period and has been based solely upon the outcome of the State capital budget process. This process has proven ineffective.

**As the first step toward addressing these and other related issues and instituting a more unified approach to solving the sanitation problems of rural Alaska, the Department recommends the formation of an Interagency Task Force. This group would act as the catalyst for advancing and refining the goals, strategies and objectives outlined on the following pages.**

## STATE BUDGET PLAN

As a vital step toward meeting the administration's ultimate goal of providing piped water and flush toilets in every Alaskan community, the Department proposes a preliminary six year capital budget plan.

- Provide washeterias and sewage haul systems in 48 of the State's 48 villages which now have Level I Drinking Water Systems (watering points or individual haul from non-treated sources).

**Estimated Cost:** \$72 million  
**Required capital funding per year (for 6 years):** \$12 million

- Improve solid waste systems in 36 of the State's 210 villages to meet required EPA solid waste standards.

**Estimated Cost:** \$18 million  
**Required capital funding per year (for 6 years):** \$ 3 million

- Upgrade piped systems in 12 of the State's 210 villages to comply with the new federal Surface Water Treatment Rule and effluent standards.

**Estimated Cost:** \$42 million  
**Required capital funding per year (for 6 years):** \$ 7 million

**TOTAL COST PER YEAR (for 6 years):** \$22 million

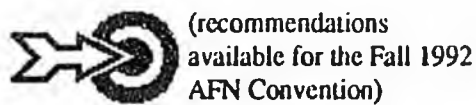
This preliminary six year budget plan will be further refined based upon the recommendations of the Interagency Task force, the availability of federal funding, and the success of innovative technologies as an alternative to conventional piped systems.

Implementing this budget plan will require a change to the State's current criteria system for prioritizing projects as well as a commitment by the State legislature to allocate capital funds in accordance with the plan. Further, a decision to provide water and wastewater services to all rural residents will require that the issue of State subsidies be addressed.

## Estimated Timeline for Solving Unmet Needs

1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

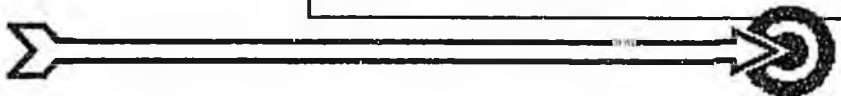
- Interagency Task Force Recommendations



- Upgrade Level 1 Water Systems (water point) to Level 2 (washeteria/honeybucket haul)



- Upgrade Level 2 Systems (washeteria/haul systems) to Level 4 (piped or trucked services)



- Upgrade Level 4 Systems (piped or trucked services) to full compliance with federal water standards.



- Upgrade all systems to full compliance with federal water standards

Data not available to make projection.

- Solid Waste System Upgrades



- Piped or trucked services in all communities which desire the services and are capable of operating and maintaining the systems.



Service Levels Defined	Communities Served
Level 1 water = non treated or watering point	48
Level 1 sewer = pit privies or honeybuckets	103
Level 2 water = washeteria	63
Level 2 sewer = community sewage haul system	29
Level 3 water = individual wells	15
Level 3 sewer = on-site septic systems*	
Level 4 water = piped/truck haul	92
Level 4 sewer = piped/truck haul	78

\*included as flush systems for purposes of this report.

Assumptions:  
 1) \$50 million available per year from all known sources.  
 2) Time lines will be shortened if additional funding is obtained

## GOALS:

**The following goals have been identified as cornerstones to addressing the sanitation problems of rural Alaska:**

- Provide adequate water, sewerage, and solid waste services in every Alaskan community.
- Improve public health and quality of life.
- Optimize State and federal funding.
- Provide infrastructure vital to economic development.
- Increase facility operation, maintenance, and management capabilities.

**The Department recommends the following six Action Strategies as solid practical steps toward achieving these goals:**

- Form an Interagency Task Force.
- Commit to a State/Federal/Community Partnership.
- Stabilize funding for rural sanitation projects.
- Assist communities increase operation and maintenance capabilities.
- Investigate and promote new technology.
- Develop a systematic approach to addressing needs.

**As the first step toward addressing these and other related issues and instituting a more unified approach to solving the sanitation problems of rural Alaska, the Department recommends the formation of an Interagency Task Force. This group would act as the catalyst for advancing and refining the goals, strategies, and objectives outlined throughout this plan.**

**During the first year of the proposed plan, the recommendations of the Interagency Task Force will be developed. These recommendations will be integrated into the State's implementation strategy during the balance of the planning period.**

## **ACTION STRATEGY:**

### **Form an Interagency Task Force.**

Due to the magnitude of sanitation needs in rural Alaska, a unified, multiagency approach to problem solving is necessary. An Interagency Task Force will be established to review, analyze, and recommend policies, standards, and solutions for formulating a federal/State/community twenty year rural sanitation strategy. The Task Force will consist of individuals, groups, and agencies representing a variety of interests and disciplines. Representation will include State and federal agencies, local officials, the Legislature, the University of Alaska, Health Corporations and rural leaders. Participation, input and recommendations from experts in the areas of engineering, housing, finance, business, health and education will provide the Task Force with the policy direction necessary to develop a comprehensive twenty year strategy for meeting the water, sewerage, and solid waste needs in rural Alaska.

Because of the complexity and number of issues at hand, the Task Force will work more efficiently if divided into several subgroups. Each subgroup will be assigned specific issues to analyze and will be responsible for reporting recommendations to the full Task Force for inclusion in the States rural sanitation strategy. During the first year of the strategy, the Department will concentrate on obtaining program direction from Task Force recommendations on the following:

#### **Objective 1 Establish uniform standards for federal and State housing**

The existing minimum water and sewerage service standards of State and federal housing programs will be reviewed by the Task Force. Current standards will be examined for compatibility with the State's overall goal of providing water, sewerage, and solid waste services to every Alaskan community. Where current standards are inadequate, specific parameters will be recommended as minimum health requirements.

If adopted, these parameters would be required in every new home constructed in Alaska by federal and State housing authorities. Additionally, methods for modifying plumbing in existing homes which do not meet the minimum code will be explored.

#### **Objective 2 Develop a policy for subsidizing the operation and maintenance of village owned facilities.**

The Task Force will review the feasibility of providing a subsidy program for operation and maintenance of village sanitation facilities. Many villages do not have the population or economic base to adequately budget for operation, maintenance and replacement costs related to providing sanitation services. These costs will be reviewed and compared to the average household income in each rural region of the State to determine an equitable solution to O&M budgeting. The cost of subsidized O&M will then be compared to the cost and benefits achieved through expansion of the Remote Maintenance Worker Program.

### **Objective 3 Recommend policies for promoting water quality testing and monitoring.**

In recent years, an average of 300 incidents per year of poor quality water have been documented from community drinking water systems throughout the State - water containing everything from fecal coliform to leeches. The importance of detecting public drinking water deficiencies early is obvious. Early detection allows immediate mitigative measures to be taken to protect public health. Without testing and monitoring, contamination of a community's drinking water supply may go unnoticed until cases of illness are reported.

Based upon the recommendations of the Task Force, the Department proposes developing a program to provide:

- Treatment and testing equipment to system operators in every community;
- Training for water system operators regarding testing/sampling requirements and techniques;
- Community access to bacti laboratories; and
- Incentives for local governments to sample and monitor the quality and safety of their drinking water.

### **Objective 4 Provide detailed recommendations regarding the level of local commitment which should be required by State sanitation construction grants.**

The Task Force will consider the level of local commitment which should be required for rural sanitation projects. Currently, rural communities do not provide match for water, sewer, and solid waste projects. Rather, these projects are funded entirely by the State or federal government. The Task Force will study: (a) the practicality, feasibility, and impacts of making local matching funds a grant requirement; (b) the level of local participation which should be committed to project construction; (c) the application of in-kind services as an alternative to match monies when a community does not have the financial capability of providing even a minimum funding match; and (d) whether the enabling statute for the Village Safe Water Program which now specifically states "A contribution toward the cost of the construction of a facility may not be required from its users" should be amended.

## **Objective 5    Develop and institute a sanitation education curriculum.**

Breaking the cycle of water borne disease in remote communities takes more than capital projects - a health education program is needed to augment ongoing construction activities. The Task Force will explore working with the Department of Education, the U.S. Public Health Service, and local school districts to develop and implement a complete "health education kit" including videos, posters, and text books. These materials would be made available to teachers in remote locations to educate children of the importance of personal hygiene, safe drinking water, proper sewage disposal, and adequate solid waste management.

It is suggested that health education become an integral part of all sanitation construction projects in rural Alaska. The whys and hows of properly using new facilities as well as information regarding communicable diseases (what they are, how they are spread, and how to prevent contacting them); the water cycle; the importance of boiling non-treated drinking water; and the importance of separation distances between places where water is obtained and where sewage or solid waste is hauled would be among the topics explored.

## **Objective 6    Improve roads in communities where haul systems are the selected alternative.**

Geographic, climatic, and economic conditions in many rural communities make piped utilities impractical or infeasible. In such cases, residents frequently select water and sewer haul systems as preferred project alternatives. Haul systems require roads with bearing capacity adequate to handle large water and sewage transportation vehicles. Unfortunately, many of the communities who desire haul systems, either do not have roads or have roads which do not now have adequate bearing capacity.

The Task Force will explore coordinating funding and resources with the U.S. Public Health Service, the Bureau of Indian Affairs and the Department of Transportation in order to construct new gravel roads or improve the bearing capacity of existing roads in communities where haul systems are the preferred alternative to piped systems.

## **Objective 7    Develop utilities for joint use by villages and schools.**

In many villages, two separate water and sewer systems are operated. One provides service to the community and the other to the school. As a result there are two treatment plants, two wastewater collection and disposal systems and dual plumbing, heating and electrical systems to support them.

Based upon the recommendations of the Interagency Task Force, the Department proposes identifying those communities where dual systems exist; examining the requirements of each; and determining where joint utilities are cost effective and practical. It is further recommended that a joint utilities pilot study be conducted by REAA's prior to applying the "joint utilities" approach in several areas.

---

**Objective 8**    **Explore State/Regional and Village Corporation Financial Partnerships.**

Many communities do not have the economic base to assist in financing sanitation projects. The Corporations which represent village residents, however, may have the resources to assist. The task force will explore the possibility of forming a financial partnership between the State and Regional and Village corporations for funding rural water, sewerage, and solid waste projects.

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**Objective 9**    **Recommend the conditions under which Direct Grants may be used as a funding alternative.**

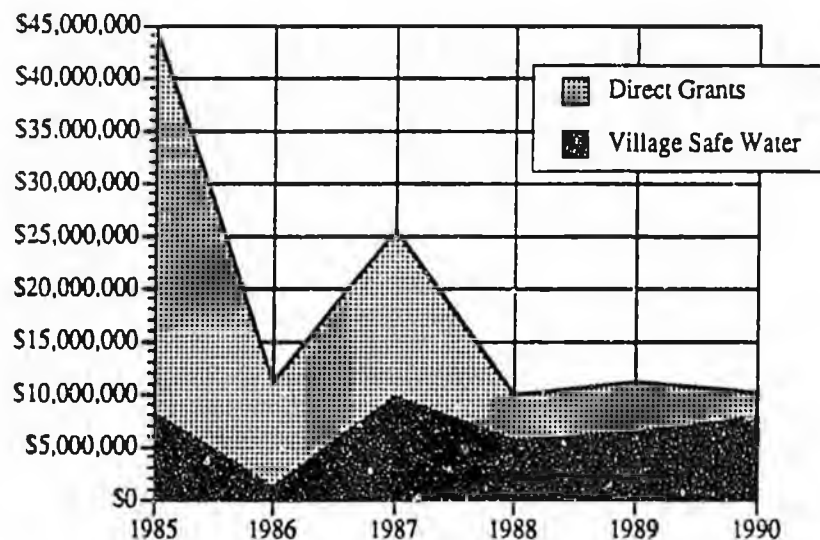
The task force will determine the circumstances under which direct grants are an appropriate mechanism for funding rural sanitation projects. Based upon this analysis, the task force will develop and recommend a policy specifying the situations under which the use of direct grants should be considered.

## **ACTION STRATEGY: Stabilize funding for rural water, sewer, and solid waste projects.**

It is virtually impossible for the State to enter the twenty-first century with hopes of providing every Alaskan community with adequate sanitation services without a stable funding commitment for the construction of necessary facilities.

As shown in the graph below, State and federal funding of rural sanitation facilities has been sporadic at best. When State revenues were high, it was relatively easy for local governments to obtain grants. However, as oil revenues declined so did the State's investment in water, sewerage, and solid waste projects. The unpredictable nature of this "boom and bust" funding cycle has made long term capital improvement planning virtually impossible for local governments. Likewise it does not allow for a systematic, long term Statewide approach to address community sanitation needs.

History of State Funding for Rural Sanitation 1985-1990



By committing to a stable Village Safe Water capital budget, the State, federal, and local governments will be better able to plan for and finance public sanitation projects.

**ACTION STRATEGY:****Commit to a State/federal/community partnership.**

It is essential that community participation in a project go beyond signing a grant offer or adopting a resolution. It is equally vital that State and federal roles transcend simply disbursing payments.

**Objective 1 Build a partnership through local commitment.**

Experience has shown that communities who actively participate with funding agencies in addressing their sanitation needs are more likely to adequately operate and maintain their facilities. If residents feel they have a vested interest in a project, the chances for its success increase greatly. The Department therefore supports requiring a local commitment to the construction, operation and maintenance of sanitation facilities constructed with State and federal funding.

It should be noted, however, that not all communities have the financial resources to contribute funding to the capital costs of a project. It is suggested that in such instances, based upon the recommendations of the Interagency Task Force, opportunities for "in-kind" services be explored.

**Objective 2 Budget cooperative between State and federal agencies.**

It is recommended that the Department strengthen its budget through cooperation with other State and federal agencies which fund rural sanitation projects. Not only will this effort leverage federal funding available for sanitation facilities, it will also ensure that duplication of effort is avoided.

In the past, the Village Safe Water program has cooperated with the Public Health Service and the Housing and Urban Development Agency in budget development. It is recommended that this relationship be expanded to include the Environmental Protection Agency and the Farmers Home Administration.

Additionally, there are several bills pending in Congress to establish new federal funding programs for sanitation projects in small communities. The Department suggests tracking and monitoring these bills closely and if they gain passage immediately inviting members of the new funding programs to participate in the State/federal budgeting cooperative.

**ACTION STRATEGY:****Assist communities increase operation and maintenance capabilities.**

The construction of rural sanitation facilities represents a multi-million dollar investment by the State in public health protection for village residents. Increased commitment to the operation and maintenance of these facilities is necessary if rural public health and the State's large investment in sanitation facilities are to be safeguarded. Weaknesses in planning, staffing, and budgeting lead to sanitation system failures as surely as equipment and mechanical breakdowns. Unless this trend is reversed, additional system failures are predicted and a tremendous financial burden will be placed on the State. The Department proposes the following multi-disciplinary approach to help deal with these problems.

**Objective 1    Define operation & maintenance capabilities and needs in each community.**

Using data obtained from Remote Maintenance Workers, Village Safe Water Engineers, Public Health Service Engineers, Native Health Corporations and community leaders, the Department will assess the operation and maintenance capabilities and needs in each rural community. The Operations Assistance program within the Department will use this information to target training efforts in communities lacking sufficient expertise for operating and maintaining their systems.

**Objective 2    Work with State agencies and authorities to develop and implement a utility management training program.**

The Department recommends working with the U.S. Environmental Protection Agency, and the Department of Community and Regional Affairs, and the Alaska Energy Authority to develop and institute a management training program to assist rural communities in implementing basic financial, accounting, bookkeeping and management systems necessary to properly manage public utilities. Through the program, local officials would learn to compare revenues to actual costs and adjust user fees accordingly; investigate alternative sources of system revenues; develop utility billing procedures and policies; and institute proper accounting and solid business management practices.

### **Objective 3 Enhance the Operator Training and Certification Program.**

The Department proposes to place increased emphasis on operations assistance to water and wastewater operators in rural areas. By stepping up its training program and offering certification testing more frequently, the Department would be better able to increase the number of certified personnel operating rural systems. The Department recommends providing a higher level of operator training through a variety of efforts including cooperative arrangements with federal and State agencies as well as various institutions of higher learning.

The benefits of expanding the State's Operator Training and Certification program are many. Without adequate training, operators will not be capable of keeping their sanitation systems going. Conversely, a well trained operator will protect expensive systems and ensure a longer useful life for capital projects constructed with state funds. System replacement costs would be further mitigated.

The Department recommends augmenting its current training lending library by developing videos which specifically address Alaska's unique systems and conditions.

As part of the proposed program enhancements, the Department recommends increasing current efforts in the following areas (1) providing hands on training for Remote Maintenance Workers, (2) administering verbal certification exams as needed; (3) providing over-the-shoulder training for operators; (4) providing class room training in regional "hub" areas; and (5) developing a comprehensive, holistic approach to solving operation and maintenance problems associated with village sanitation facilities.

## **Objective 4** **Expand the Remote Maintenance Worker Program.**

Most of the State's rural communities lack a public works department, a full time professional water/sewer operator, and in many cases an electrician or plumber. Systems are frequently left in the hands of volunteers who, with limited resources and knowledge, face a wide array of mechanical, environmental, and public health related problems. In areas where climatic, economic, and demographic conditions make operation and maintenance of facilities arduous, technical expertise is of great importance. However, the remote location of most villages makes it economically infeasible for outside services to be obtained when technical assistance is most needed. The Remote Maintenance Worker Program offers a partial solution to this problem.

Currently, the program consists of eight Remote Maintenance Workers (RMWs) who are mechanical experts as well as trainers. Each RMW is assigned a circuit of 10-15 villages and resides in a hub community within their area. Through the efforts of these RMWs, the program employs a two-fold approach to protecting costly facilities and public health.

**1. Technical Assistance.** Due to the remoteness and climatic conditions found in most villages, even minor operational problems can result in malfunctions that can lead to catastrophic system failure. As technical experts, RMWs are available to villages 24 hours a day throughout the year for advice and emergency repairs.

**2. Operator Training.** As educators, RMWs provide operators with emergency and routine on-the-job training. Operators are trained at their own speed at a level commensurate with their individual requirements.

The solid commitment and ongoing cooperation of the legislature, the Department of Environmental Conservation, several Native Health Corporations, and rural villages throughout the State is positively reflected in the success of the RMW program.

**Unfortunately, less than half of the State's rural communities are serviced by a Remote Maintenance Worker (refer to exhibit \*)**

**The Interagency Task Force will evaluate expanding the RMW program so that within the next five years, all rural communities are served by a Remote Maintenance Worker. This will ensure the protection of rural public health and the State's capital investment in rural sanitation infrastructure. RMW assistance will only be provided until a community has obtained the competence to operate its system without State assistance.**

• Insert •

**Map showing areas served by an RMW with a  
listing of villages covered/not covered**

## **ACTION STRATEGY:**

### **New technology- research & development projects.**

The Department proposes active investigation and promotion of innovative and alternative technology for the delivery of rural sanitation services. Demographic, economic, and climatic conditions make sanitation construction and operation in rural Alaska among the most expensive and technically challenging in the nation. A research and development program needs to be instituted to develop alternatives to expensive and complex piped systems capable of providing an equal level of service.

Research and development activities should represent a community, State, federal, University and private sector cooperative effort both in funding and design. A multi-tiered approach to investigating and developing new sanitation technologies is suggested.

As the first step in this cooperative effort, the Department advocates sponsoring annual technology seminars where promoters of innovative and alternative sanitation technologies can present their concepts to the engineering community. This would encourage new ideas from manufacturers and designers and would introduce sanitation engineers to nontraditional technologies.

It is suggested that the Interagency Task Force include a research and development subcommittee to review new technologies including those presented during annual technology seminars to determine which merit further study.

As funding allows, those technologies recommended by the subcommittee as showing the most promise would undergo field testing which would consist of three phases. The first phase would include targeting a receptive village to host the demonstration project, a project inception briefing during a council meeting of the hosting community, and (if necessary) fabrication of prototype units. During phase two, prototypes would be installed in the homes of four to ten volunteer families. Phase 3 would consist of project evaluation. If the project is a success and well received by the village, expansion of the technology into the rest of the community would be recommended through the capital budget process.

This phased approach would allow communities to participate in and assess each step of a demonstration project before continuing on to the next phase. Further, it would allow communities to observe and evaluate technologies prior to deciding whether to adopt the new technology on a community-wide basis.

All studies, evaluations, and reports regarding the successes or failures of new sanitation technologies in village Alaska would be made available to interested parties.

## **ACTION STRATEGY:**

### **Develop a systematic approach to addressing sanitation needs in rural Alaska.**

Local communities frequently do not have a realistic current long range sanitation construction plan. Therefore, it is difficult for the State to establish a long term spending plan that includes community specific projects. For that reason, our planning process in the past has been keyed to local government needs as expressed annually through local priorities.

#### **Objective 1    Conduct a Statewide survey of the existing facilities in rural communities.**

The Department will conduct surveys of rural communities to develop and update a computerized inventory of the existing level of sanitation service provided in each of the State's rural communities.

#### **Objective 2    Develop a 20 year analysis of community sanitation needs.**

The Department recommends developing an assessment of the capital investment necessary to address each rural community's water, sewerage, and solid waste needs. Cost estimates would consider existing levels of treatment (from data obtained during the Statewide survey recommended above) and the types of system improvements currently needed (e.g. upgrades, expansion, or reconstruction, or new construction). In addition to providing cost estimates for addressing today's sanitation needs, the capital investment required to solve future needs would be projected over a twenty year period. Forecasts would consider population projections, system replacement costs, and facility improvements necessary to comply with State and federal requirements.

#### **Objective 3    Develop a comprehensive long range facility funding plan.**

The Department recommends incorporating the recommendations of the Task Force and data obtained during the state-wide survey and twenty year needs analysis proposed above into a comprehensive long range facility funding plan. The plan could serve as a basis for the allocation of capital budget funding. It could also be used to assist State and federal agencies in program planning, policy evaluation, and program management. Additionally, it could be used as a tool for local governments in the development of multi-year community capital improvement plans.

# STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

## DEPT. OF ENVIRONMENTAL CONSERVATION

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January 22, 1992

The Honorable Dick Eliason  
President  
Alaska State Senate  
P.O. Box O  
Juneau, AK 99811

Dear Senator Eliason:

Today I am transmitting to you the fiscal year 1991 Annual Report on the Oil and Hazardous Substance Release Response Fund, also known as the "Response Fund," pursuant to AS 46.08.060.

Last year, in my transmittal letter, I noted that the Annual Report had several deficiencies. Most notably, we were incomplete in accounting for expenditures made from the Response Fund by other agencies, and incomplete in our accounting of the location and condition of oil spill response assets owned by the State. I also noted that we had commissioned an audit on previous uses of the Fund, and Fund management practices.

I am pleased to inform you that, as a result of that audit, several important Response Fund management changes have been made to correct the deficiencies noted last year. These are detailed in the enclosed Annual Report. As well, we have stepped up our efforts at cost recovery, and the prospects for recovering costs from the Fund's largest use so far, response to and litigation over the T/V Exxon Valdez oil spill, has been assured with the recent settlement.

The lack of a proper accounting system for Response Fund assets has yet to be fully resolved. However, by the end of this fiscal year we intend to have a full accounting of the location, condition, and estimated value of all equipment purchased with Response Funds. Physical assets, as well as accounts receivable from responsible parties, will be listed on the Response Fund's balance sheet for fiscal year 1992. We will continue to audit physical assets, and plan to begin a regular maintenance and depreciation plan. Fund assets, either in use by state agencies or in depots awaiting emergencies, are a critical component of Alaska's response capability.

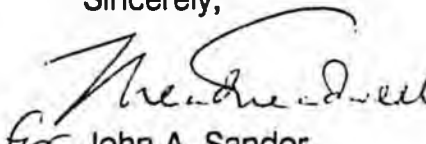
January 22, 1992

As the Legislature considers the FY 1993 budget for the Fund, I would note with concern the fact that the spill reserve has dipped to \$12 million. We believe the spill reserve should be at least \$30 million to give the state the best flexibility for response to another emergency. To rely on federal response funds or the emergency powers of the Governor leaves the state little room for quickly undertaking many of the activities we found essential during Exxon Valdez, including supporting local response. Last year, with the passage of Senate Bill 25, the Legislature "earmarked" \$10 million of the Spill Reserve to assist local communities in emergency response.

We have made major gains in developing state and local response capability in the last year, establishing DEC's Spill Prevention and Response Division (SPAR), and developing a more cooperative relationship with our sister federal, state, and local agencies who we must work in concert with during an emergency. In the future we will work with the Legislature on increasing Response Funds for the voluntary response corps, equipment depots, local and State training, research and development, and the cleanup of contaminated sites.

Thank you for your support. Please contact me if you have any questions or require additional information regarding the Department's management of the Response Fund.

Sincerely,

  
for John A. Sandor  
Commissioner

KNT/rr (SPAR-eliason.470)

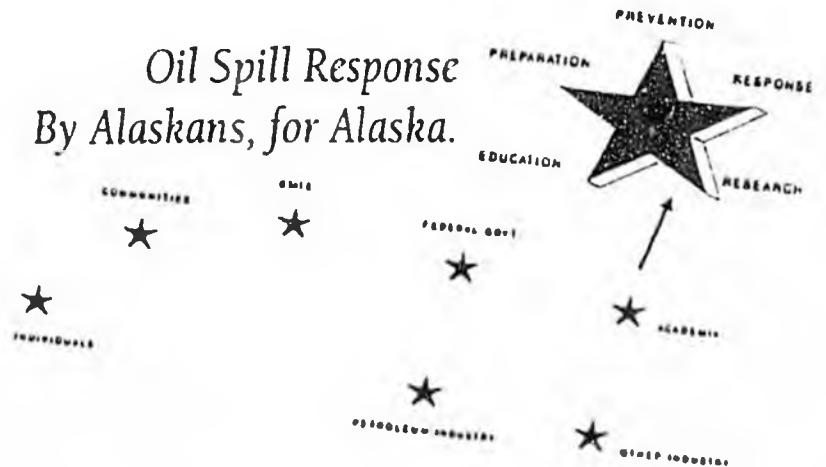
cc: Nancy Quinto, Senate Secretary

**DRAFT**

# A COASTAL COMMUNITIES OIL SPILL COOPERATIVE FOR ALASKA

A F E A S I B I L I T Y S T U D Y

*Oil Spill Response  
By Alaskans, for Alaska.*





Regional Citizens' Advisory Council / 601 West Fifth Avenue, Suite 500 / Anchorage, Alaska 99501-2254 / (907) 277-7222 / FAX (907) 277-4523

**MEMORANDUM: Regional Citizens' Advisory Council  
Oil Spill Prevention and Response Committee**

92 - 1

**TO:** Lloyd Jones  
**RE:** Review of Draft ACCC Study  
**DATE:** 1/14/92

The RCAC's OSPR Committee is requesting final comments on this draft Alaska Coastal Communities Cooperative Study (ACCC) by February 15, 1992.

Pursuant to a request from the Nearshore Working Group, RCAC undertook a feasibility study of the concept of a coastal communities oil spill cooperative. This co-op would provide the means for local involvement in spill response, with particular focus on shoreline protection and nearshore response, which are the major remaining gaps in the spill protection scheme for Prince William Sound and other coastal areas.

The OSPR Committee has already gone through one phase of soliciting comments on the concept; and these comments have been addressed in this draft of the study. We are forwarding a copy of this most recent draft of the feasibility study for your comments.

The RCAC endorsed the concept of a coastal communities cooperative at its December 1991 meeting. We will continue to refine the technical issues involved in creating such an organization. From those of you who cannot support this co-op concept, we invite suggestions for alternative methods to achieve our common goal.

**A COASTAL COMMUNITIES OIL SPILL  
COOPERATIVE FOR ALASKA**

**A F E A S I B I L I T Y S T U D Y**

**PRINCE WILLIAM SOUND**  

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**REGIONAL CITIZENS ADVISORY COUNCIL**

Anchorage, Alaska • January 1992

*prepared by*  
**International Spill Technology Corporation**  
1300 Walton, College Station, Texas 77840

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## EXECUTIVE SUMMARY

The organizational structures and response equipment necessary to initiate the first strike against major crude oil spills are largely in place in Alaska. There are, however, a number of problems left unresolved by the existing spill response capability in the state, including:

- the need for an implementation plan for shoreline protection and nearshore response;
- the need to equip and train local residents to respond to spills;
- the need to effectively organize, train and use the capabilities of the fishing fleet and other vessels;
- the need to protect against the very real problem of noncrude spills.

The Alaska Coastal Communities Cooperative (ACCC) provides a comprehensive and realistic solution to the major gaps in spill response in Alaska and provides a model for other states to follow. A Coastal Communities Cooperative would provide a means by which local knowledge and local resources are used in an effective and timely manner during a spill response. The ACCC will ensure that those who are closest to the spill, who have the most to lose and who care the most about protecting the coastal environment are involved in the response. The ACCC will satisfy both industry's and the state's obligations under state and federal law to involve local residents in spill response and provide adequate response to spills.

The ACCC will be established as a non-profit organization with a governing board representing industry, federal, state and local government, environmental, fishing, and native interests. It will also have a technical advisory board with similar, but broader and more technical membership. The ACCC will have a director to operate the ACCC on a day to day basis. The ACCC staff and volunteers will be organized according to NIIMS-ICS guidelines.

ACCC's primary mission is to protect shoreline and nearshore resources anywhere in coastal Alaska. Its role in any given response may vary from providing primary response for small spills in local communities to being part of a coordinated response managed by industry, the state or the federal government.

The ACCC will have main bases in the regions of maximum risk. Spill specialists would serve Southeast, Prince William Sound, the Seward-Kodiak-Cook Inlet area, the Aleutians and western Alaska. Depots of equipment and supplies would be placed in each of these regions to supplement existing industry and local community resources. ACCC is designed to complement the roles of the three major Alaska cooperatives. In the interest of minimizing costs, competition and confusion, the ACCC's role would be carefully defined to avoid duplication of services.

The ACCC has an initial capitalization cost of \$30 million and a \$6 million per year operating budget. The primary sources of money are industry and the State Oil and Hazardous Substance Release Response Fund. Spill response activities would be reimbursed by the responsible party.

There is broad support for the Alaska Coastal Communities Cooperative. Fishermen, community members, environmentalists, members of industry and native Alaskans have lent their endorsement to the concept of the Alaska Coastal Communities Cooperative.

There are legitimate needs in oil spill control in Alaska which have not yet been adequately addressed. The Alaska Coastal Communities Cooperative is an excellent way to satisfy these needs.

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## THE INTERNATIONAL SPILL TECHNOLOGY CORPORATION

The International Spill Technology Corporation is the consulting enterprise of Dr. Roy W. Hann, Jr. Dr. Hann is the director of the Center for Oil Spill Technology for Texas A&M University, Texas Engineering Experiment Station. Dr. Hann has twice headed Texas A&M's Environmental Engineering Program and has also served as director of the University's Sea Grant program.

Dr. Hann's oil spill work began with his early research on Texas ship channels and estuaries, along with his appointment to the U.S. Coast Guard-sponsored National Academy of Science's Committee on Maritime Hazardous Materials in 1970. After directing the environmental studies for the Sea Dock project, a proposed deep water port in Texas, and directing the team which developed the curriculum for the API-sponsored Oil Spill School at Texas A&M in 1974, Dr. Hann was selected by the U.S. Coast Guard to serve as a science advisor to the U.S.C.G. Strike Force sent to assist the government of Chile with the Metula tanker spill in the Straits of Magellan. This event led Dr. Hann to create Texas A&M's Oil Spill Technical Assistance Program, which has participated, in various capacities, in a large number of spill responses in the United States and abroad.

Among the more notable spills on which Dr. Hann has worked are the Amoco Cadiz, Cabo Tomar, Ixtoc I, Burmah Agate, Esso Bayways, Alvenus, Mega Borg, and the Ranger and Hawkins blowouts. His Alaska assignments have included a study of discharges from the production platforms in Cook Inlet, Exxon Valdez monitoring programs review, and several studies for the Regional Citizens' Advisory Council.

Dr. Hann has developed training courses which were presented in four regions of the world for the International Maritime Organization (IMO) and in Chile, Brazil and India. Dr. Hann has served in a wide range of oil pollution, marine resource and environmental study roles for international agencies, the United States government, the state of Texas, various oil companies and individuals. In 1983, he was awarded the prestigious Palladian medal by the National Audubon Society and the American Association of Engineering Societies for his work in the field of environmental conservation.

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#### VI. SUMMARY

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## LIST OF FIGURES

COVER: The diagram on the cover depicts the cooperation of individuals, communities, state government, federal government, academia, the petroleum industry and other industry to create the Alaska Coastal Communities Cooperative to fill a mission of oil spill prevention, preparation, response, training and technical development to protect the natural resources of coastal Alaska and its citizens.

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## I. INTRODUCTION

In recent years there has been a worldwide effort to develop the capability to respond quickly and effectively to oil spills. Alaska has been part of this effort; indeed, it is probably not an overstatement to say that Alaska has been on the leading edge of this movement. During that time, Alaska's readiness to respond has been greatly enhanced through the collective efforts of government, industry and residents. This extensive effort has resulted in a much better understanding of Alaska's needs, and the recognition that oil spill response capability is not fully realized in Alaska. The impetus for this study was the identification of a significant gap in the various ongoing efforts to provide adequate response in Alaska and the attempt to find a solution.

The existing network of industry-based oil spill cooperatives (the Cook Inlet Spill Response, Inc. (CISPRI) in Cook Inlet, the Ship Escort and Response Vessel Service (SERVS) in Prince William Sound, and Alaskan Clean Seas (ACS) in the Arctic) has focused, with good reason, on initial response in the vicinity of the spill. Far less emphasis has been placed on the protection of shorelines and nearshore areas and the recovery of spilled oil from those areas. This type of response is of particular concern to the people of coastal communities who depend on the natural resources of coastal waters.

To fill this gap, residents of coastal communities have repeatedly raised the idea of creating a coastal communities cooperative; people in industry and government have also been supportive of the concept. This report explores the concept of an Alaska coastal communities cooperative (ACCC) in an effort to determine its feasibility, and if it is feasible, how to make best use of it.

A central thrust of the concept is the creation of an organization to make use of the people and equipment available in local communities to protect coastal resources. Coastal communities have made it quite clear that they are not only able to provide assistance during spill responses, they are eager to do so. As one person put it, "It's not a question of whether to get local citizens involved in spill response, but of how to do it. They're going to be there; the *Exxon Valdez* (oil spill) proved that."

The state legislature recognized this when it passed SB 264, which mandates establishment of local equipment depots and local response corps. The express intent of the law was to create the structure and the means by which fishermen and other local residents could bring to a spill response their considerable equipment, knowledge of local conditions, and commitment to protecting coastal resources.

The federal Oil Pollution Act of 1990 similarly requires that oil spill response in Prince William Sound include the mobilization of local resources. The responses to both the *Exxon Valdez* spill and the recent Kenai Pipeline Co. spill in Cook Inlet prove the inefficacy of waiting until after the spill to organize local resources. The ACCC would organize local resources and provide appropriate training, equipment and coordination to deal with both small spills and catastrophic spills. In doing so, it would help satisfy the requirements of federal and state law.

There are other reasons a coastal communities cooperative makes sense. For instance, it is neither economical nor prudent for each contingency plan holder to establish a separate equipment and technology base of the size necessary to respond to the largest potential oil spill it might experience. Indeed, most companies have not chosen to meet their legal requirements to clean up oil spills by going into the spill response business themselves. They may rely on oil spill cooperatives or independent oil spill clean up companies. Sometimes they can contract with oil

industry service companies that have diversified into the spill response business. In Alaska, however, the service companies are often geographically remote from the areas at highest risk of spills.

Alaska has three large, well-staffed regional industry cooperatives. Yet, by their nature and charter, these cooperatives do not have jurisdiction over all the potential oil spill events in Alaska. In the first instance, they do not encompass the entire coastline at risk from oil spills. And in the regions for which they are responsible, the industry cooperatives focus on initial response at the source of the spill and lack the ability to protect all of the nearshore and shoreline areas that could be affected by a spill. Nor can they cover the entire range of response capability required by emerging Alaska law and regulations, particularly the contingency planning and response standards of Alaska House Bill 567.

This report evaluates how an Alaska coastal communities cooperative could provide a reasonable degree of protection for small spill risks in communities and an additional layer of capability to assist the existing industry cooperatives with a major crude oil spill. The ACCC provides a method for industry and government to jointly finance the acquisition of equipment for use by local fishermen and other residents familiar with the area and motivated to protect their coastlines. The state, the public and the industry all benefit by the establishment of an organization that will meet state and federal requirements, while lowering overall costs and increasing the effectiveness of spill responses.

The following sections explain in detail the concept of the ACCC. Section II focuses on feasibility considerations. Section III explains how the ACCC would be equipped, organized and structured to prepare for and carry out a spill response in the Alaska coastal zone. Section IV explores technical response training and technology development the ACCC would carry out in support of its primary mission. Section V looks at the financial operation of the ACCC, including its annual operating costs and capital equipment levels. The final section presents an overall view of the concept, develops conclusions and discusses the plan of action needed to bring the ACCC to fruition.

## THE NEED FOR THE COOPERATIVE

When the *Exxon Valdez* spill began, there was no organized system to make maximum use of Alaska resources. This can be partially explained by comparing southcentral Alaska to other areas in the world that have heavy oil production and transportation activities.

Normally, the production of a large volume of crude oil is accompanied by a large infrastructure of oil field service industries such as supply boat operations, spill cleanup contractors, logistics suppliers, etc. In Alaska, however, oil production is primarily based on land in the north, while the shipping operations are located 800 miles to the south. Cook Inlet is the notable exception, where in smaller scale, they go on side by side. Thus, in Alaska, the shipping risk is for the most part not offset by the significant offshore service capability, as it is, for example, in southern Louisiana.

In responding to the *Exxon Valdez* spill, Exxon quickly looked to its support industry in Europe and the lower 48 states since this was the group with which it normally worked. Unfortunately, because the oil industry did not have any such working relationship with Alaskan fishermen, fish spotters, vessel charterers, local contractors and their equipment, and other local resources, there was no quick and effective way for Exxon to put these valuable assets to use in its spill response. The desirability of effectively using Alaskan resources is one of several factors that would be addressed by the ACCC.

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In looking at the goal of better preparedness for future oil spills, the problems to be solved include:

1. The risk of major crude oil spills in coastal Alaska will be reduced by prevention requirements, but still exists and today is only partially addressed.
2. The risk of refined oil product spills in coastal Alaska has not been adequately addressed at this time. See A.D. Little, "Study of Non-crude Tank Vessels and Barges," Task 4 - Response Organizations and Depots (July, 1991).
3. To date, industry planning and response efforts for potential crude oil spills have focused heavily on containment and removal at the spill site, rather than shoreline protection and nearshore response. Greater emphasis needs to be placed on shoreline protection and nearshore recovery, especially since past history indicates that site responses are only partially successful.
4. The primary spill response organization in Prince William Sound, Alyeska's SERVS division, will withdraw from a major spill response within 72 hours after the spill and relinquish spill management and operations to the company whose tanker caused the spill. Thus, there is a need for an operational structure to bridge the transition from SERVS management to management by the responsible party.
5. The existing oil spill cooperatives have geographic and operational limits imposed by their member companies or by government. Consequently, these cooperatives do not have responsibility for dealing with all the spills that might occur throughout coastal Alaska. For example, SERVS will respond only to spills from the Valdez terminal and Trans-Alaska Pipeline tankers, and then only in Prince William Sound. No cooperative has responsibility for spills in the Aleutian Islands or Western Alaska. The recent formation of SEAPRO, a cooperative in Southeast Alaska, is a welcome addition to the scene. However, its organizational structure and responsibilities are not yet clearly defined and at this time, it owns no equipment.
6. State funds derived from taxes on crude oil production and earmarked for the creation of a statewide system of oil spill equipment depots and local response corps have yet to be used for these purposes.
7. Local resources that can effectively participate in spill response have not yet been effectively trained, equipped or organized to achieve their maximum effectiveness on either small spills or major crude oil spills.
8. Although some oil spill equipment and resources have been stored by industry in local communities, the ability to rapidly deploy this equipment has not yet been demonstrated.
9. Although the level of technical expertise available in Alaska has greatly increased in the past few years, there is no effective system in place to augment that expertise with local knowledge to maximize the effectiveness of oil spill response.
10. Environmental and economic considerations will influence future oil spill response activities more than they have in the past. Far from being a burden, however, incorporation of these concerns into spill response will enhance the success of response activities while simultaneously minimizing environmental harm and the resulting damage claims. Accomplishing this requires a clear knowledge of Alaskan ecosystems, the effect of Alaskan conditions on oil spill equipment and technology, and a clear knowledge of the impact of oil spill response methods on the Alaskan environment.

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11. Section 5005 of the Oil Pollution Act of 1990 requires the pre-spill positioning of response equipment and a hatchery protection program in Prince William Sound, as well as the establishment of an oil spill response organization. OPA '90 also requires oil spill response training for the residents of Prince William Sound and the local fishing industry. The act requires practice exercises to test the effectiveness of the equipment and personnel described in oil spill contingency plans.

Sections 4201 and 4202 of OPA '90 clearly mandates a response capability greater than that needed for an Exxon Valdez spill size. Equally clearly, no existing organization in Alaska has met that requirement.

There are undoubtedly a number of ways in which to accomplish each of these eleven goals. The advantage of establishing an entity like the ACCC, as proposed in this report, is that the ACCC can be used to solve all of the stated problems.

### THE ALASKA COASTAL COMMUNITY COOPERATIVE AS A SOLUTION

Oil spill cooperatives come in all different sizes, budgets and configurations depending on the will of their members, as modified by government and public influence. Oil spill cooperatives have different organizational structures, levels of equipment inventory, personnel levels and operating budgets.

It is worthwhile to discuss the various types of oil spill cooperatives and note the ways in which they differ and their strengths and weaknesses. The author has classified oil spill cooperatives on a scale from Class A through Class F. This rating system is displayed in Figure 1.

The Class A cooperative has a professional, full-time director; a professional staff; a significant equipment inventory; and a reserve of equipment and personnel provided by its membership.

The Clean Seas and Clean Coastal Waters Cooperatives in California, the Clean Sound Cooperative in Washington state, and CISPRI in Cook Inlet are all Class A cooperatives.

The Class B cooperative is similar to the Class A, except its personnel are provided by contract. The Delaware Bay and River Cooperative and the Clean Harbors Cooperative in New York are Class B Cooperatives. Clean Coastal Waters in California has just followed the prevailing trend of moving up from Class B to Class A by opting for direct employment of staff, and hence, greater professionalism.

Class C cooperatives are primarily equipment pools maintained by a professional manager and a maintenance staff. The equipment pool is for use by member companies and their contractors. The Class C cooperative is not a response organization and does not fill a management role during response, except for equipment maintenance. The Clean Gulf Cooperative for offshore production operators in the Gulf of Mexico is a Class C cooperative. Alaska Clean Seas has been a Class C cooperative, but upgraded to a Class A cooperative in 1991.

Class D cooperatives are merely equipment pools maintained by contractors. The equipment is made available to member companies at the time of a spill.

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## FIGURE 1

### HIERARCHY OF OIL SPILL COOPERATIVES

#### TYPE

#### A. TRUE PROFESSIONAL COOPERATIVE:

- 1) CORE OF EQUIPMENT
- 2) PROFESSIONAL DIRECTOR
- 3) PROFESSIONAL FULL-TIME STAFF
- 3) MEMBERSHIP PROVIDES IMMEDIATE RESPONSE RESERVE

#### B. CONTRACTOR STAFFED PROFESSIONAL COOPERATIVE:

- 1) CORE OF EQUIPMENT
- 2) PROFESSIONAL DIRECTOR
- 3) OPERATIONS PROVIDED BY CONTRACTOR
- 4) MAY OR MAY NOT HAVE MEMBER RESPONSE RESERVE

#### C. CONTRACTOR-OPERATED EQUIPMENT POOL

- 1) CORE OF EQUIPMENT
- 2) CONTRACTOR PROVIDES PERSONNEL TO MAINTAIN AND OPERATE EQUIPMENT

#### D. EQUIPMENT POOL WITH MAINTENANCE CONTRACTOR

#### E. EQUIPMENT POOL IN WAREHOUSE OR PLACED WITH MEMBER COMPANIES

#### F. MUTUAL AID AGREEMENT COOPERATIVE

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Class E cooperatives are equipment pools stored in warehouses or at member company sites.

Class F cooperatives are mutual aid cooperatives, in which members agree to share equipment during a spill. The fledgling Southeast Alaska Petroleum Response Organization (SEAPRO) is currently a Class F cooperative, although it plans to upgrade its status to Class D or higher in the near future.

Most major cooperatives started as Class D, E, or F cooperatives in the 1970's and have subsequently progressed to Class A cooperatives. The Marine Spill Response Corporation (MSRC) in the lower forty-eight is planning to start operations as a Class A cooperative.

Most cooperatives in the United States are purely industry cooperatives without government participation. A notable exception is the highly successful, but moderately sized, Corpus Christi Area Spill Cooperative in Corpus Christi, Texas. The Corpus Christi Cooperative has received funding from the city and county governments. In Japan, the Marine Safety Administration sponsors the Maritime Disaster Prevention Center. In addition to the funding it receives from the national government, the center is supported by facility and trip charge user fees.

Not surprisingly, given the special conditions in Alaska, no one cooperative is a perfect model for Alaska. Thus, a somewhat unique industry-state-local government-local resource format is envisioned for the ACCC.

Industry should be involved because it creates much of the risk and has the legal and financial responsibility to respond and to develop the capability to respond. Industry may acquire resources to place with the ACCC, and will pay a portion of the capital and operating costs.

Local government will be involved because equipment and personnel will be placed in strategic local communities. In addition, the ACCC would spearhead the response to spills in local harbors and waterways.

Local resources will be involved because fishermen, charter operators, tug and barge operators and their vessels and crews would be major resources in the ACCC's response strategy.

State government will be involved because it is required by law to establish local response corps and equipment depots, and is in some instances required to respond to spills.

The federal government may be involved if it chooses to place federal response resources with the ACCC for maintenance and deployment, or if it chooses to contract with the ACCC to participate in federalized or federally-directed spills.

In summary, to meet the spill response needs in Alaska, the ACCC should be a Class A cooperative, which is funded by government and industry and which uses local resources as its reserve for major responses.

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## OBJECTIVES

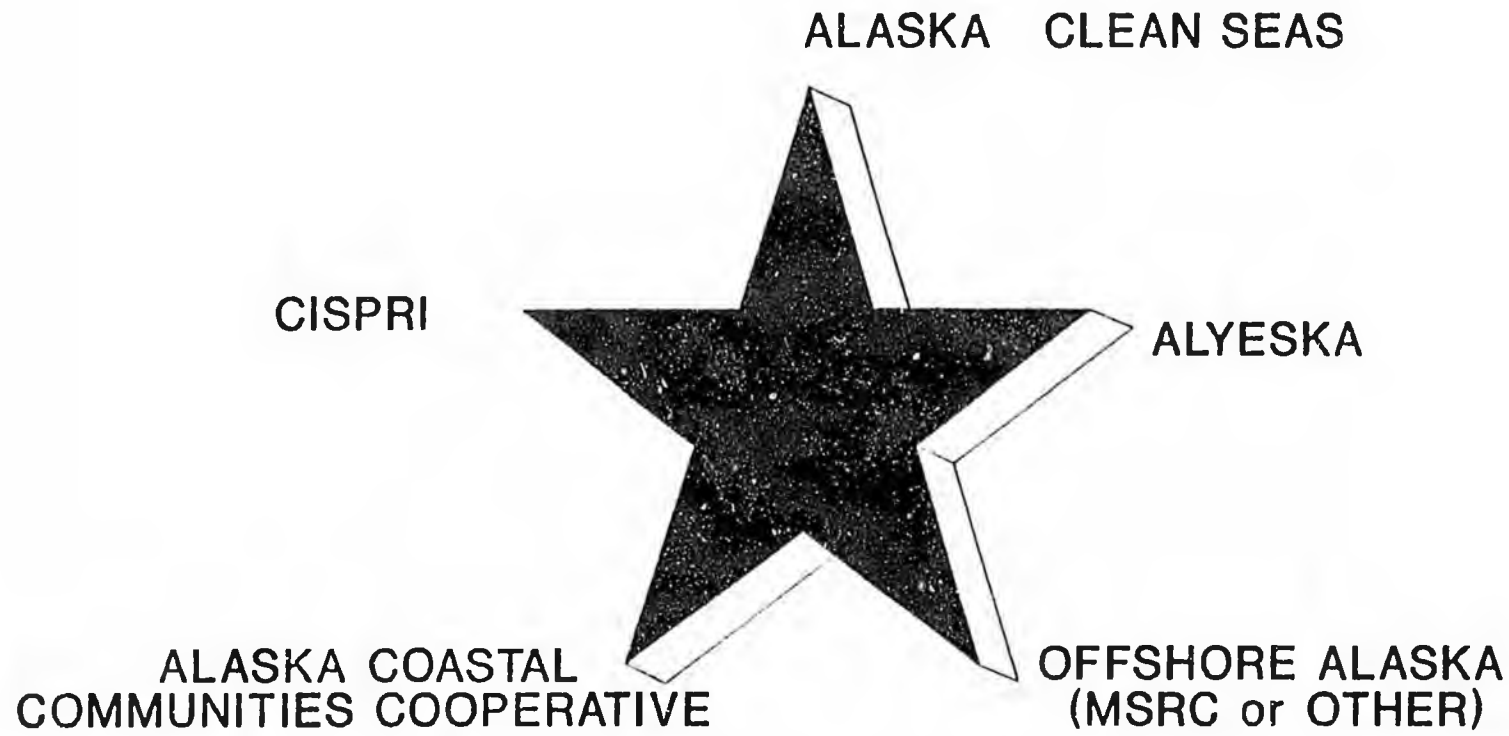
To solve the stated problems, the objectives of the ACCC will be:

1. To provide a mechanism for harnessing the considerable energy, resources, knowledge, and commitment of local residents to enhance oil spill response capability in coastal Alaska.<sup>1</sup>
2. To develop the capability to carry out shoreline protection and nearshore response activities in support of response to crude oil spills in Cook Inlet and Prince William Sound, and surrounding areas or coastline potentially affected by TAPS tanker trade.
3. To train the core staff and the reserve staff of local residents, fishermen and vessel operators in oil spill control technology, the National Institute of Incident Management System - Incident Command System (NIIMS-ICS), Hazardous Waste Operations and Emergency Response (HAZWOPER), and marine firefighting so they will be qualified to participate in oil spill responses.
4. To participate in oil spill response activities for catastrophic crude oil spills by providing shoreline protection, nearshore response and other appropriate actions for which the ACCC is equipped and trained. These activities would complement the activities of existing cooperatives, with ACCC acting as a response action contractor on behalf of SERVS, CISPRI, a member company, the state of Alaska or the federal government. ACCC's participation in these spills will be pursuant to NIIMS-ICS guidelines.
5. To develop a data base of and a contractual relationship with operators of fishing, charter, and other vessels to provide support vessel services during a spill response.
6. To serve as the contracting entity to dispatch support vessel services to SERVS, CISPRI, or member companies.
7. To develop the capability to respond to spills of refined oil products throughout the coastal waters of Alaska.
8. To implement refined oil spill response activities in the coastal waters of Alaska, as either a primary or support response action contractor on behalf of a member company, the state of Alaska or the federal government.
9. To develop a Response Plan to guide ACCC's response actions.
10. To develop a Technical Response Program that includes development of technology suitable for the ACCC mission and assistance to member organizations in prevention and contingency planning.

The fulfillment of these objectives would substantially improve the state of readiness for oil spill response in Alaska and result in a substantial increase in spill response performance. The ACCC would be a focal point in the star of oil pollution control of Alaska shown in Figure 2. With the establishment of the ACCC, the major remaining problem would be response in the open water of the Gulf of Alaska.

FIGURE 2

ALASKA OIL SPILL RESPONSE CONCEPT



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## ADVANTAGES OF THE ACCC

As a supplement to existing oil spill control activities, the ACCC would generate a number of advantages.

1. The total level of oil spill response capability in Alaska would be significantly enhanced in two ways. First, all appropriate local resources will be put to use. Secondly, the ACCC will ensure that the response equipment it acquires is compatible with existing resources, thus creating maximum response capability at minimum cost. For example, there are skimmer heads that use seiner vessel hydraulics and small barges for storage of recovered oil that can be towed and serviced by seiners.
2. Industry funds and resources can be leveraged by government funds and resources. For example, rather than having government and industry establish separate equipment depots for crude and product spills, a common, well-managed pool would serve both and create a greater unified response capability.
3. Trained, equipped and effectively managed local resources can respond more quickly to a spill, thus limiting the spread and impact of the spill, which reduces environmental and economic damage and cleanup costs.
4. Greater public trust will be generated to the benefit of both industry and government when an Alaska based response entity is created because the public will be assured that local resources will be effectively used in protecting local coastlines, and because the public will participate in governing the ACCC through representation on its board of directors.
5. Costs for the ACCC's response would generally be substantially lower than a contractor's bill for the same efforts. This is because ACCC's core personnel would be billed at regular payroll rates, supplies are generally billed at cost, equipment is not generally charged for except for repairs, and the not-for-profit status creates no reason to overcharge a client.
6. A separate organization like the ACCC can easily initiate action in parallel with other response organizations. For example, while a primary response group is fully engaged in recovery activities near the spill site, the ACCC can simultaneously be carrying out shoreline protection activities.
7. If contract vessel support services are provided to both parties by a third such as the ACCC, response activity is less likely to be interrupted when spill management passes from SERVS as initial responder to the spiller.
8. The ACCC can provide a combination of local knowledge and technical knowledge that will augment the expertise of the spiller or its contractors, which will markedly improve response efforts. Furthermore, locally developed data bases of response capabilities are likely to be more accurate than externally maintained data bases.
9. The existence of a permanent organization like the ACCC will alleviate the serious problem of loss of knowledge and experience acquired during a spill.
10. Logistics bottlenecks can be minimized by the dispersed pre-positioning of equipment. With trained responders and equipment available throughout coastal Alaska, response activities can be initiated with greater speed and can be carried out when they would otherwise be constrained by weather or transportation limitations.

11. The ACCC can assist industry in fulfilling the contingency planning and spill response requirements of HB 567, as well as OPA 90's requirements for mobilization of local residents and vessels.
12. The ACCC provides a mechanism for the state to fulfill its mandate to create local response corps and equipment depots, and its need for training state government staff and the local response corps.
13. Creation of the ACCC will very likely increase the support for and likelihood of the legislature passing acceptable responder liability relief in 1992.

### PREVIEW OF THE ACCC ORGANIZATIONAL STRUCTURE

A not-for-profit corporation is the likely organizational structure for the ACCC. A management board will be appointed from the contributing participants and public groups. This board will set the policy and budget of the organization. A separate technical advisory board will be appointed to deal with equipment selection, training requirements, technical aspects of response, and evaluation of drills and response activities. The board will hire the director who will manage the ACCC on a day-to-day basis and serve as its spill response manager.

Local advisory groups, such as the LEPC's, will operate in the individual districts to coordinate local response with other community emergency response resources within in the communities, such as volunteer fire departments, EMS's, etc. LEPCs will provide a policy-making body when local guidance is needed.

Five major sections of the cooperative will operate in both spill and non-spill periods. A command staff will assist the director in administrative, government coordination, and public information activities. An operational staff will prepare for and implement response operations in the field for a wide range of spill scenarios in various geographical locations.

The operational support/logistics section will handle a wide range of activities to enable the operations section to perform effectively in the field. This section will also manage the program for support vessels on contract with the ACCC, and provide support for the response activities of SERVS, CISPRI or member companies, as requested.

The operations support/financial section will manage all income and expenses, and handle all accounting/bookkeeping functions for the organization.

The technical response section will be responsible for strategic and tactical planning under the NIIMS Incident Command System (ICS), the training and technology development programs, and development of the Operations Response Plan.

A response core of full time employees will be supplemented by a trained local reserve in each community and by selected contractors, including response and support vessel owners and operators.

This structure is presented in greater depth in Sections II and III of this report.

## SECTION II: FEASIBILITY CONSIDERATIONS

There are many different ways to measure the feasibility of a project. Most commonly, feasibility involves financial feasibility (e.g., will the project generate enough income to warrant a capital expenditure) or technical feasibility (e.g., can a project be built from a technological standpoint).

Many, much larger cooperatives such as SERS and MSRC have been proven feasible. Therefore, a moderate sized coop such as ACCC is feasible, as well.

Also, both SERVS and MSRC have been deemed financially feasible by their members on grounds other than just stand alone economic analysis. In other words, their costs have been judged acceptable as part of the overall cost of transporting oil to refineries and/or to the consumer. This acceptance is undoubtedly influenced by legal requirements and public relations.

Basic financial feasibility is not, however, the only issue involved in assessing the feasibility of the ACCC. The others include political feasibility, legal feasibility, resource feasibility, fiscal feasibility and mission feasibility.

### POLITICAL FEASIBILITY

Political feasibility is realized if a concept meets the objectives of the political groups and entities from whom support or approval is needed. For the ACCC, these groups include the following:

1. The state legislature. The primary role of the Legislature vis a vis the ACCC is to appropriate funds from the Oil and Hazardous Substance Release Response Fund to underwrite a portion of its equipment acquisition and operating expenses. This contribution will encourage industry participation in the ACCC. The Legislature will also be called upon to resolve the issue of immunity for responders. It may also be necessary for the legislature to pass special legislation to permit state funds to be used by a non-profit entity such as the ACCC.
2. The administrative branch of the Alaska state government, including the Governor's Office, the Division of Emergency Services (DES), and the Department of Environmental Conservation (DEC).

DES and DEC are responsible for the implementing the programs funded by the Oil and Hazardous Release Substance Fund, and thus have a significant interest in appropriations from the fund. Specifically, the ACCC would provide a mechanism for satisfying many of the requirements of SB 264 (local equipment depots, local response corps, etc.), which DES is tasked with implementing. These agencies would also be involved in carrying out the state's response obligations for small spills.

3. The North Slope Crude Oil Tanker Fleet Operators (e.g., BP, ARCO, Exxon, Amerada Hess, Chevron, and Tesoro). These operators create the major risk of a spill in Prince William Sound, and would therefore be expected to support a major part of the ACCC's capital and operating budgets. The benefits of doing so include using the ACCC's response capability to satisfy their contingency planning and spill response requirements under state and federal law, particularly the requirement for a nearshore response and shoreline protection plan and the and the OPA 90 requirement for mobilization of local residents and vessels during a spill.

4. Alyeska and Its Owner Companies (BP Exploration Inc., Exxon Pipeline Co., Arco Pipeline Co., Mobil Alaska Pipeline Co., Phillips Alaska Pipeline Co., Union Alaska Pipeline Co., and Amerada Hess). As a potential user of ACCC services, Alyeska would be a contributor to the ACCC capital and operating budget. Responsibility for maintaining and deploying equipment from SERVS equipment depots might be transferred to the ACCC, as might other tasks such as the hatchery protection program. In the event of a spill from the Valdez terminal or from the pipeline, Alyeska may use the vessel support services or the response capability of the ACCC.
5. Cook Inlet Crude Oil Tanker Fleet and Facility Operators. This group includes the Drift River Terminal, pipeline operators, production platforms, and refineries, as well as tanker operators. As contributing members of ACCC, these companies would call on the ACCC for nearshore response and shoreline protection or to supplement CISPRI's activities. They would benefit by using ACCC's capabilities to offset their response planning responsibilities under state and federal law.
6. The Non-Crude Storage and Transportation Industry. This group includes the fuel suppliers that transport and store non-crude petroleum products and any industrial operations that store petroleum products in or near coastal waters. Unless they have access to an organization like ACCC, these companies may find it difficult to comply with the requirements for upgraded contingency plans and response capabilities. The cost of membership in the ACCC would be significantly less than the costs of independently satisfying these requirements.
7. The Department of Defense. The federal government transports large quantities of refined oil products into Alaska for military uses, and thus has the same interest (and problems) as other fuel suppliers.
8. The United States Coast Guard. The USCG serves as the Federal On-Scene Commander (FOSC) for oil spills, as specified in the National Contingency Plan. As such, the USCG may use the ACCC as a response action contractor for mystery spills or for other spill responses which it is directing. It is also possible that the USCG will choose to place federal response equipment with the ACCC for maintenance and deployment.
9. The State Emergency Response Commission (SERC) and the Local Emergency Planning Committees (LEPC's). These committees are designated under state and federal law to carry out local emergency planning. The ACCC would be a response resource for the SERC and LEPC's.
10. Coastal Communities. In addition to the socio-economic harm they suffer as a result of catastrophic spills, the coastal communities have a risk of local oil pollution in their waterways and harbors. Some communities have volunteer spill response units that would be supported by the ACCC, or they may become part of the ACCC.
11. The Prince William Sound and Cook Inlet Regional Citizens Advisory Councils. These organizations provide oversight and recommendations on petroleum transportation issues. They would perceive the ACCC as a significant improvement in existing response capabilities.
12. Native Village Corporations and Regional Native Corporations. As substantial landowners in the areas at risk from spills, whose constituents depend on the subsistence resources of the coasts, the Native corporations are major players in any decisions that affect the level of protection for residents and natural resources from oil spills. With shoreline protection and nearshore response as one of its primary missions, the ACCC will be addressing a major concern of the Native corporations. Native villages would be among the local communities in which equipment would be located, and residents and boats from these communities would be part of the ACCC's complement.

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13. Environmental Organizations. Naturally enough, groups concerned about natural resources, wildlife and pollution have been and continue to be interested in assuring compliance with state and federal requirements for oil spill response. In addition to the enhancement of response capability that the ACCC would provide, these groups are likely to see the consolidation of response activities with ACCC as a plus from another standpoint: consolidation of local involvement in one organization will decrease the complexity of overseeing that local resources are being fully incorporated into contingency plans.
  14. The Fishing Industry. Fishermen are concerned about protecting the fishing resources and the effective use of the fishing fleet's ability to protect those resources. The fishing industry is also the source of a significant number of small spills, and as such may find itself in need of the ACCC's services.
  15. Local residents, businesses, charter vessel operators, and contractors. Many of these people depend on coastal resources for their livelihoods and recreation, and thus have a heightened interest in participating in the activities of the ACCC. Moreover, spill response is a growth industry in Alaska, and it is not unreasonable for those communities that suffer the most from oil spills to be able to offset their risk of loss somewhat by participating in a professional response organization.
  16. Recreational Users and Providers. Tourism and recreation is an increasingly important part of the Alaskan economy. Indeed, many small businesses in coastal Alaska depend for their survival on income from recreational users. The interests and concerns of both the tourist industry and individual recreational users must be considered when making decisions about protection of coastal resources.
  17. Academic and Research Institutions. These entities are potential participants in the planning, engineering and scientific support of the ACCC.

These groups fall into four basic categories: government, sponsoring and user entities, potential participants in the ACCC's planning and response activities, and interested parties. Some groups may belong in more than one category, for instance Native corporations may be participants and are obviously interested parties. The ACCC will be successful if:

1. The state is willing to assign the state agency depots and response corps role to the ACCC for coastal spills.
2. The coastal spill response needs of the entire state are met by the ACCC.
3. The state accepts the feasibility of creating a joint industry/government solution to the identified needs. The Corpus Christi Area Spill Control Association demonstrates that such a joint effort can succeed. It is a modest sized and simply organized cooperative compared to the large West Coast cooperatives. Nevertheless, it is highly successful in its geographic and environmental setting. Local government rather than industry provides its personnel reserve. Its local government orientation has led to very low response costs, even when contractors are used. Exorbitant rates are not tolerated by the cooperative's manager, who doubles as the City of Corpus Christi's Petroleum Director.
4. The Legislature is able to craft an acceptable, long-term solution to the issue of responder immunity from tort liability during the 1992 session.

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5. The state has a role which provides oversight management of the ACCC through either participation on the Board of Directors or the budget review process.

The ACCC will be even more feasible if the Trustees of the *Exxon Valdez* Trust Fund recognize that one-time funding of a part of the capital acquisition for the ACCC would provide significant protection of Prince William Sound and the spill affected region.

Is the ACCC feasible to the potential participants in its planning & response activities? It will be if:

1. The participants recognize their interests are best served by the local communities focus of the ACCC.
2. They perceive they will be properly trained and equipped.
3. They recognize the ACCC will follow a policy of fair and reasonable compensation for service.
4. They recognize that all will benefit from having the ACCC as a focus for their services under one contract with a responsible party, rather than each individual being required to negotiate his/her own contract.
5. The participants have a role in the management of the ACCC.

Is the ACCC feasible to other interested parties. It will be if:

1. They recognize that a locally based ACCC, with a strong technical component that will take advantage of local knowledge, can lead to a faster, better managed response that reduces economic and environmental damage.
2. They concur that the ACCC warrants responder immunity.
3. They are involved in the management of the ACCC.

The answer to the question of the political feasibility of the ACCC is that it can be politically feasible.

## RESOURCE FEASIBILITY

In looking at resource feasibility, this report focuses on three important resources; personnel, support vessels and the shoreside space and facilities that must be available to support the ACCC concept.

### PERSONNEL

The core group of employees for the ACCC is expected to come from a diverse group of individuals with oil industry, maritime, academic, fishing, contractor and tradesman backgrounds, primarily Alaska residents. Alaskans will provide the main source of staffing. However, they will establish relationships with Corpus Christie.

The staffing of Corpus Christi has shown that such personnel can be found and recruited to an oil spill cooperative, thus core staffing is deemed feasible.

The other personnel requirement for the ACCC is the trained reserve that will be recruited from the local communities. A ready reserve of over 2,000 participants is a realistic expectation.

As shown by the partial listing of population figures of Table 1, the population of coastal Alaska is significant, but not large. The seasonal and entrepreneurial nature of many Alaskan jobs and businesses, and Alaskans' concern for their environment, make it likely that reasonable numbers of the population can, and will, make themselves available for either short or long-term response activities. Their availability for the real event will likely be greater than for spill drills.

**TABLE 1: POPULATION OF ALASKA COMMUNITIES (1990)**

Anchorage .....	226,338
Kenai .....	6,327
Seward .....	2,699
Cordova .....	2,110
Valdez .....	4,068
Whittier .....	299
Kodiak .....	6,365
Homer .....	3,660
Seldovia .....	316
Juneau .....	26,751
Ketchikan .....	8,263
Sitka .....	8,588
Unalaska .....	3,089
Sand Point .....	878
Chenega .....	94
Tatitlek .....	119

(Source: Dave Dengel, City of Valdez, Community Development Department.)

Finally, of course, the *Exxon Valdez* spill proved there is no dearth of Alaskans willing to work on a spill response. The availability of personnel is not an obstacle to the establishment of the ACCC.

### VESSEL RESOURCES

It cannot be gainsaid that Alaska has a remarkable inventory of vessels suitable for use during an oil spill response. The winter haul-out greatly reduces the number of vessels available during the off season, but this could be overcome by providing standby funds for winter availability for a core of selected vessels. The vessel fleet and their crews, would be a major asset of the ACCC. Considerable experience in using and developing this resource has already been gained by Alyeska and Exxon, on which ACCC could be expected to build.

It is not unreasonable to expect to provide sufficient vessels and crews for as many as 50 strike teams of six to eight vessels each, plus additional vessels in the event of a catastrophic spill. This has been verified by the *Exxon Valdez* spill, in which 488 vessels were used from Prince William Sound, 93 from Southeast Alaska, 284 from Seward, 111 from Anchorage, and 182 from Kodiak.

A recent preliminary study carried out for RCAC indicates that there are 3,699 vessels of various types with lengths greater than 20 feet in Southcentral Alaska. Figures were not available for Southeast Alaska, the Aleutians or Western Alaska, but could be gathered if the ACCC concept were accepted. Nonetheless, these figures indicate a significant reservoir of vessels that could be used in the event of a spill. In a spill response, vessels are utilized for a variety of purposes. The most useful vessels are the seiners and trawlers that are equipped with variable pitch propellers or trolling gears. These attributes permit them to pull oil boom for long periods of time at slow speeds.

Table 2 shows the vessel fleet of South Central Alaska from the RCAC sponsored preliminary study.

**TABLE 2: SOUTHCENTRAL ALASKA FISHING FLEET**

<u>VESSELS</u>	<u>(1)</u> <u>TOTAL</u>	<u>(2)</u> <u>PWS</u>	<u>(2)</u> <u>CI</u>	<u>(2)</u> <u>KODIAK</u>	<u>OTHER</u>
GILLNETTERS	1034	550	580		4
SEINERS	680	280	80	320	
CHARTER BOATS	252				
TENDERS	168	50		100	
CRABBERS	78				
LONG LINERS	318				
TRAWLERS	19				
TUGS	6				
LANDING CRAFT	+				
BARGES	+				
OTHER	107				
<b>TOTAL</b>	<b>3,699</b>				

Sources: (1) Fishing Vessel Analysis; RCAC, January 1992  
 (2) Personal communications from Tom Copeland, June 1991

The hydraulic systems of many vessels, especially seiners, can often be used as the power pack for off-the-shelf skimmer systems. Seiners and other large vessels generally have sufficient power to pull and maneuver small barges.

Stern and bow gillnetters can be rigged for boom towing under certain circumstances. The extremely fast bowpickers can provide valuable support services, such as shuttling operations for personnel, delivery of both oil spill and medical supplies, security services and other similar duties, particularly in support of shoreline operations.

Tenders and crabbers can serve as berthing, logistics, and communication centers. They also could support transfer operations from small barges to a larger mother barge. These vessels also may be capable of functioning as maintenance and repair platforms.

Tugs would be essential for moving and tending the large barges used for storage of recovered oil. Landing barges are essential for supporting beach cleanup operations and for moving bulk supplies.

Charter boats have proved important in moving people and supplies, assisting in communications, and supporting shoreline assessment activities. Seaplanes can fill an important roles as observation aircraft, and for communication, emergency medical evacuation, transportation, and coordination roles.

Table 3 shows the estimates in Alyeska's contingency plan of the number of vessels available two, five and ten days into a spill operation.

TABLE 3: VESSELS AVAILABLE AT 2, 5 AND 10 DAYS

<u>Vessel</u>	<u>2 days</u>	<u>5 days</u>	<u>10 days</u>
Bowpickers	107	118	124
Sternpickers (18-43 ft.)	27	32	34
Seiners (32-56 ft.)	180	210	255
Tenders (60-120 ft.)	61	70	82
Tugs (40-230 ft.)	16	41	85
Crewboats (36-150 ft.)	12	15	26
Supply Vessels (120-220 ft.)	10	21	30

It is believed these numbers can be increased considerably through ACCC efforts.

It also must be recognized that the vessel fleet is a heterogeneous resource in terms of vessel size, condition, the skill of skippers and crews, and the inherent free spirit associated with this entrepreneurial field.

The Exxon Valdez spill and Alyeska's subsequent experience has shown that fishing vessels and other local vessels are a feasible, albeit imperfect resource.

## SPACE RESOURCES

Space, particularly near the shoreline, will be of considerable importance to the ACCC. Shoreline operating space appears to be at a premium in Alaska. The ACCC will need one or more bases of operation with substantial indoor space (on the order of 50,000 to 80,000 square feet). This indoor space will be used for offices, response centers, classroom training, hands-on equipment training, communications, warehousing of materials and equipment, parts inventory and repair operations.

The ACCC will need substantial dock footage to service and equip barges, contract vessels, and first strike vessels. The large number of small barges and vessels will likely necessitate the availability of its own small dry-dock capability. Cranes, forklifts and other equipment will be needed for deployment and loading of vessels.

Tankage and flat storage areas will be necessary for interim storage of recovered oil. Open storage will be needed for bulky items and Conex storage units.

Similar but smaller scale space needs will exist at remote storage depots. Consideration is being given to deploying and docking self-contained, barge-based response depots at remote locations. These could periodically be rotated back to ACCC bases for maintenance and repair.

The availability of space is unknown at this time and would be the subject of a detailed search in subsequent studies or during early stages of the cooperative's implementation. Special leasing terms or donation of state, local, native corporation or industrial sites may well influence base location.

## LEGAL FEASIBILITY

The first issue is the proper form of charter. MSRC has chosen to pursue the status of a not-for-profit corporation. Other cooperatives have chosen to remain partnerships of member companies.

The ultimate solution for the ACCC will likely hinge on issues such as state participation in a non-profit entity, the extent of tort liability, borrowing and purchasing policies, and whether a quasi-state entity has the flexibility to respond effectively under the pressure and timetables required by response scenarios.

The primary question appears to be whether to seek tax-exempt status. Doing so would severely restrict the cooperative from having a separate pricing structure for members and non-members. A not-for-profit corporation could be implemented as a quasi-government entity like the Alaska Housing Authority. This approach could make state participation easier.

Responder immunity is necessary for the ACCC to avoid tremendous liability exposure. It is anticipated that the state legislature will take up the issue of immunity for spill responders again during the upcoming session.

If the not-for-profit form is implemented, the most important contract will be to implement state funding. Discussion of a possible format will await agency decisions and specific legal advice. A contract covering professional service and placement of major equipment items could be negotiated with comparative fiscal and legal ease.

A host of other contracts would be needed with industrial members, other users of ACCC services, support vessel

and operators, as well as for facility acquisition and response contractors employed by the ACCC.

The issue of insurance will require much attention in this age of litigation. Six major areas are identified for later attention. The insurance topic has been subdivided into routine operations and spill response periods. Separate rates and perhaps even policies will apply. Indemnification clauses in contracts must also be considered.

In its contingency plan, Alyeska listed some 152 permits considered necessary to respond to an oil spill. The ACCC will need to proceed carefully to ensure that all regulatory obligations are met.

Discussions with the Clean Coastal Waters and Clean Sound Cooperatives indicate legal and insurance issues are significant, current problems; but these problems can be overcome for a reasonable cost.

Thus, although not without obstacles, the ACCC is legally feasible. (N.B. The overall concept of legal feasibility is being addressed by a professional maritime lawyer, and will be discussed in a separate document.)

TABLE 4: MAJOR LEGAL ISSUES FOR THE ACCC

1. Form of charter and management structure.
  - A. Not for profit
  - B. Not for profit - tax exempt
  - C. Quasi-government entity (similar to Alaska Housing Authority)
  - D. For profit corporation
2. Responder immunity: Extension of HB 196
3. Contracts with:
  - A. State of Alaska
  - B. Organizations contracting with the ACCC for its services
  - C. Vessel operators
  - D. Facility acquisition
  - E. Contractors and suppliers
4. Insurance during non-spill periods:
  - A. Director liability
  - B. Business liability
  - C. Payroll, including Jones Act
  - D. Vessel
  - E. Equipment and facilities
  - F. Employee health, life and disability
5. Insurance during spill response
6. Indemnity agreements
7. Permits
8. Funding guarantees for expenses during spill response operations

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## FINANCIAL FEASIBILITY

The ACCC can be developed if funds are provided. The size and scope of the cooperative will be dictated by the ultimate level of funding. There are, however, several financial issues that do affect the feasibility of the cooperative.

1. The allocation of cost between parties, e.g., how much by the state; how much by the North Slope Crude Oil Tanker Fleet Operators, Cook Inlet Tanker Fleet Operations, the Crude Oil Terminals, and how much by the non-crude petroleum industry in Alaska.
2. Who will be the owners of the ACCC equipment and what service charges made for its use in a spill or drill.
3. What mechanism will be developed for interim financing to pay for spill response until reimbursement is received from the responsible party. Possible sources: the U.S. Oil Spill Trust Fund, the Alaska Oil and Hazardous Substance Release Fund or other appropriate sources.
4. Can the ACCC issue bonds or use commercial borrowing to acquire all or part of the needed equipment inventory?
5. Can the ACCC use sole source purchasing authority for selected equipment needs, repair parts, spill time contracts, etc.
6. Will the ACCC have different rates for members and non members for personnel and other non-equipment items.
7. How will operating funds be obtained for response operations until reimbursement is made?

All of these financial issues can be resolved. Thus, it is believed that with proper design, the cooperative can be financially feasible in all needed areas.

## MISSION FEASIBILITY

The ACCC seeks to do effectively the job that is proposed for it, but its supporters are mindful of the old saying about fools walking where angels fear to tread. It is appropriate to measure carefully the mission against the level of resources provided and vice versa for the ACCC.

The ACCC offers several important benefits, and provides financial leverage for the several partners, but the cooperative must be careful it does not promise to carry out tasks for ridiculously less than others can, or to promise results beyond its capability. For this reason, MSRC has been careful to avoid giving performance guarantees, merely promising instead the best effort under the unique circumstances of a spill. The ACCC would be foolish not to follow this lead. With this reservation, it is deemed feasible that ACCC can accomplish its mission.

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## SECTION III: THE ALASKA COASTAL COMMUNITIES COOPERATIVE AS INITIALLY PERCEIVED

The complete design of an oil spill cooperative is beyond the scope of this project. Nonetheless, sufficient detail of the cooperative as it is perceived at this time is necessary for the reader to obtain a clear picture of the concept, and to serve as a platform to discuss needed decisions and alternative concepts.

### MISSION - BASIC CONCEPT

The overall mission of the ACCC is summarized in the following statements.

The Cooperative will be prepared to respond as a contractor under the direction of a state, federal or On Scene Coordinator and operate within the NIIMS Incident Command System (ICS) in response to spills.

It will also be authorized to initiate its own spill response when it recognizes that a spill has occurred and to do whatever actions are feasible until the government or responsible party takes over the response.

Response to three different classes of spills is envisioned:

- A. For spills of crude oil from a tanker or terminal, the cooperative will support the operations of SERVS and CISPRI with contract fishing and other support vessels and will initiate shoreline protection, nearshore response and other response activities within its capabilities in support of the response effort.
- B. For major product spills from a tanker or large barge, the cooperative will be prepared to carry out a leadership or response contractor role in support of the responsible party, covering spill site containment and removal, shoreline protection, nearshore removal and beach cleanup.
- C. Throughout the state, the cooperative will be prepared to respond in coordination with the responsible party for product spills from a marine terminal, barge, ferry, fishing vessel, industry bulk storage facility, etc. This response would deal with all aspects of the response from spill site containment and removal to shoreline protection, nearshore removal and shoreline cleanup.

Furthermore, it will be the mission of the cooperative to carry out a wide range of prevention, contingency planning, response preparation, training, research and technical assistance activities to support its primary response mission, and to prevent or minimize the impact of spills in the state of Alaska.

### ORGANIZATIONAL STRUCTURE

A coordinating management board is envisioned for the Alaska Coastal Communities Cooperative regardless of the formal charter mechanism to be selected.

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Figure 3 depicts the management board, and suggests that its membership will be selected from state government, the designated citizens advisory councils, the state and local emergency planning committees, the Alyeska consortium and/or the North Slope Crude Oil Tanker Fleet Operators, the transporters and distributors of crude oil and petroleum product, fishing and wildlife interests and the federal government. Each of these entities has an interest in seeing that an effective response mechanism to oil spills is developed.

It is further envisioned that a technical advisory board will be established to provide guidance and review activities from a technical standpoint, rather than a management standpoint. Specific activities would include providing recommendations and evaluating plans for equipment acquisition and technical operating methods, assistance in developing training programs and suggesting and reviewing research programs.

It is further envisioned that the cooperative's director will choose an internal organization that closely follows the NIIMS ICS structure. This would be reflected by an administrative staff, an operations response core, and operations support group with logistics and finance components and a technical response planning group.

The response core would be supported by community task forces of reserve and/or volunteer forces and contract operational resources. The operation support group with logistics and finance components would be backed by contractor resources and would manage the key support vessel contracting program. The technical response group would be responsible for response planning, technical response, training and technology development activities.

### GEOGRAPHICAL DISTRIBUTION

The mission of the ACCC dictates that it place its administrative bases, equipment resources and personnel where they can best carry out their responsibilities. Selection of ACCC sites will ultimately be based on spill risks, potential magnitude of spills, properties of materials likely to be spilled, local environmental conditions that influence air and water transportation, and facilities available or provided to the ACCC.

Obviously the ACCC mission to assist with catastrophic crude oil tanker and terminal spills requires a major presence in or near Prince William Sound and Cook Inlet. Furthermore, the A.D. Little study clearly shows major product activity is present in Southeast Alaska, the Aleutians, Cook Inlet and, to a lesser degree, Prince William Sound. Depots will be placed based on the risk and the suitability of equipment and technology in the local environmental system.

### PREVENTION CONCEPTS

The most effective cooperatives work hard to encourage their membership to avoid spills. Prevention planning concepts are depicted in Figure 4. The role of the ACCC's staff will be to assist those who store, transport and transfer oil by recommending the steps they can take through facility modification, operations, maintenance and initial response actions to minimize the occurrence of spills and to minimize the spread and ultimate response effort to deal with problems that occur.

FIGURE 3

ORGANIZATIONAL STRUCTURE OF THE ALASKA COASTAL COMMUNITIES COOPERATIVE

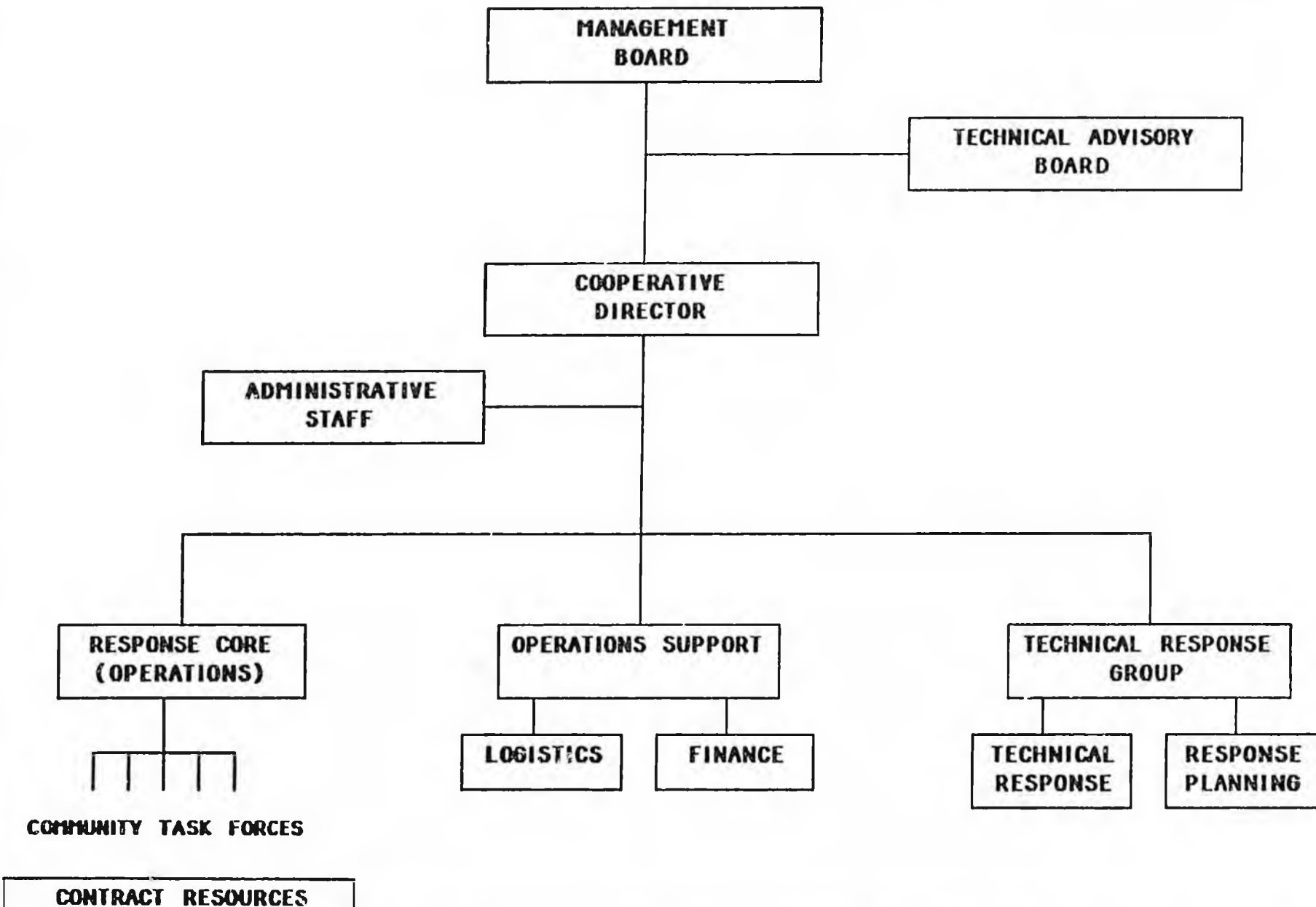
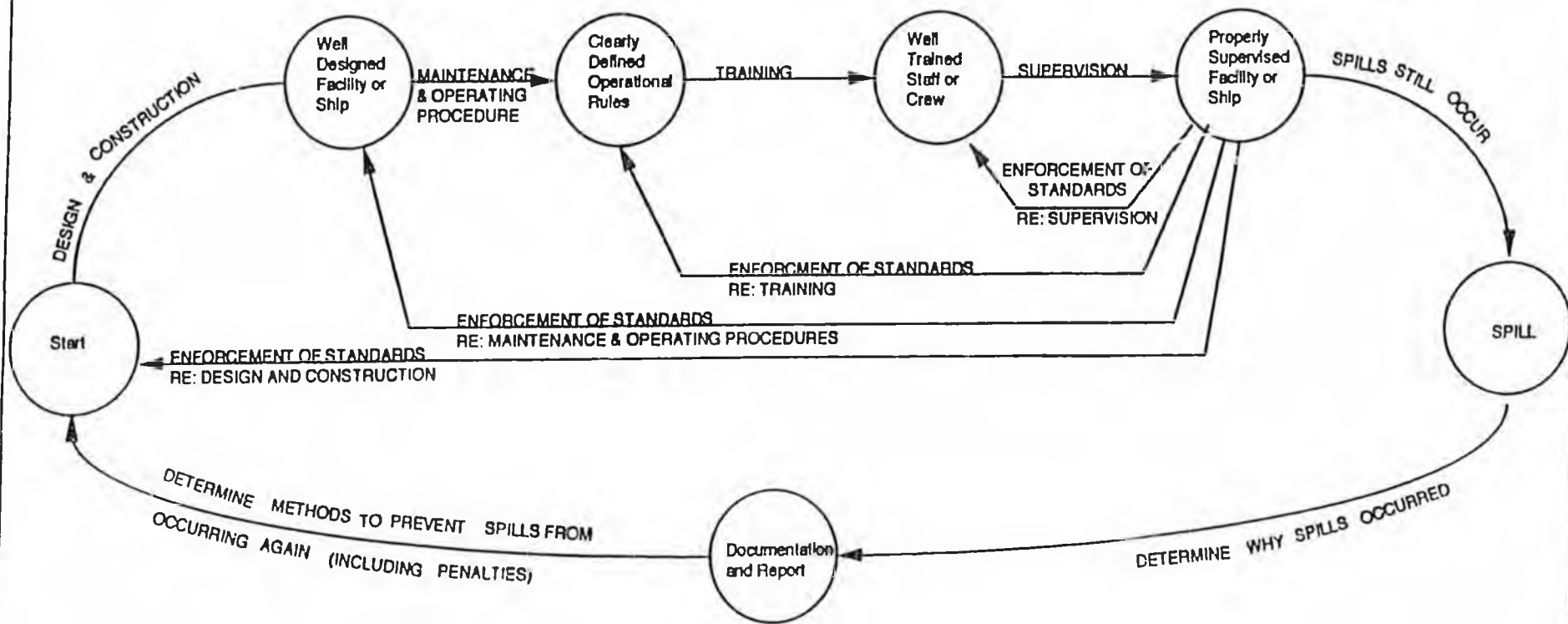


FIGURE 4

# THE PREVENTION PLANNING CYCLE



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## CONTINGENCY PLANNING

MSRC specifically prohibits its personnel from helping in contingency plan preparation for its member companies, except for reviewing the components that refer to MSRC capability and proposed action.

The organizational format of the ACCC should be such that liability issues will not dictate such an arms length relationship. Indeed, the role of the ACCC in carrying out its responder role as the immediate backup to responsible party personnel requires a close linkage between industry and the ACCC, determining operational actions on a site specific basis.

Figure 5 shows a typical contingency planning diagram. Of particular importance are the site specific planning and the resource acquisition steps. This will include both responsible party and ACCC assets and efforts.

## OPERATIONAL CONCEPTS

The main business of the ACCC is spill response. In this section we discuss how the ACCC will implement its response actions.

Four levels of response are contemplated; these can be compared to the classic one alarm, two alarm, three alarm and four alarm fire response.

Level one would be a response to a product spill anywhere in Alaska where the spill response could be completely staffed by the responsible party, the core professional staff of the ACCC, local response team volunteers and contractors hired directly by the responsible party. The equipment resource used would be only that of the responsible party, the cooperative and the contractors.

Level two would be a spill requiring the personnel and equipment of level one plus the use of the cooperative's pool of support vessels equipped with ACCC-owned or managed equipment and ACCC reserves or volunteer staff.

Level three would be a spill involving the resources of level two, plus equipment brought from outside the ACCC region to match up with available ACCC contract support vessels. The outside equipment could be rented from contractors or suppliers, obtained through mutual aid agreements with Alaska or lower 48 cooperatives, industry inventories or obtained by mutual agreement or USCG request.

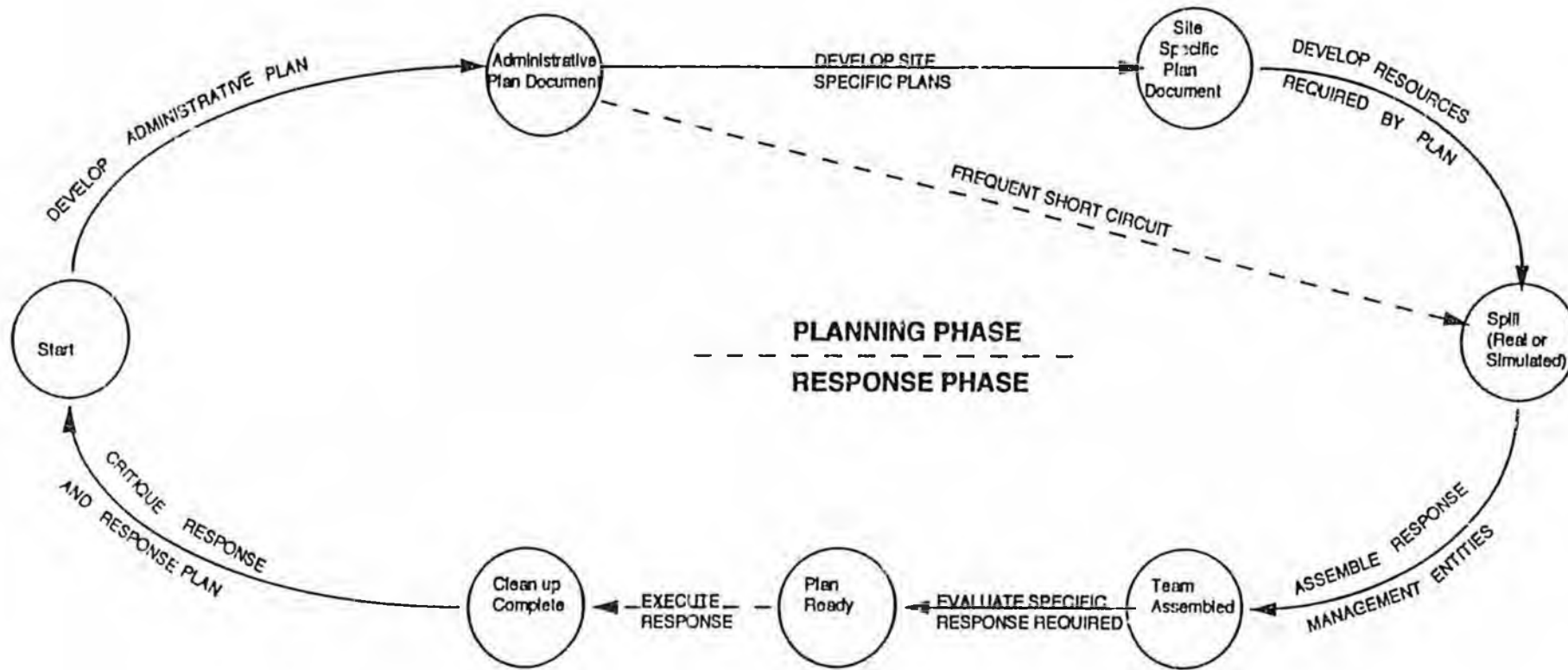
Level four would include all aspects of level three plus the maximum obtainable resources from SERVS, CLIPRI, and Alaska Clean Seas; mutual aid resources from lower 48 cooperatives, international resources available from the Oil Spill Service Center in Southampton, England and the full resources of the federal government including newly acquired USCG resources and the Navy ESSM bases at Stockton, California and Williamsburg, Virginia.

One of ACCC's most important tasks will be to ensure that it is prepared to use this equipment through maintenance of an inventory or data base, establishment of appropriate acquisition methods and training of personnel to use the equipment.

Equipment types that match those in the cooperative inventory; for which spare parts are on hand; and for which the cooperative core staff and reserves are best trained to use and maintain will be the first acquired.

# FIGURE 5

## THE CONTINGENCY PLANNING CYCLE



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## OPERATING FORMAT DURING NON-SPILL PERIODS

The core staff of the ACCC is responsible for managing the day-to-day business of the cooperative. In doing so, they will carry out a list of everyday activities similar to that of any comparable business. The format for the non-spill periods will remain the same as for spill periods, namely administrative support, Operations, Operations Support/Logistics, Operations Support/Finance and Technical Response/Planning.

### Administration and Administration Support:

This group will work with the Board of Directors and the Technical Advisory Board to shape the direction of the ACCC; work with state government and member companies to ensure spill time operations; and work with the media and the public to present the concept of the ACCC to the public. The Administration will work with local communities in the development of their response teams and arranging ACCC logistical support. The Administration would, of course, tend to the business of managing the ACCC.

### Operational Group:

The operational group will carry out activities needed to prepare for future spill response operations, including:

- Equipment selection and acquisition
- Receiving and testing equipment
- Cleaning, repair and stowing of equipment
- Preventive maintenance programs
- Stock or restock depots
- Readiness drills
- Participate in operational or hands-on training

### Operational Support/Logistics Group:

The logistics team will carry out its activities to replenish the inventory of the ACCC from the last spill, and to prepare for the next one. Activities include:

- Logistics planning
- Maintain and assure the readiness of the vessel support program
- Manage non-spill logistic operations
- Participate in drills
- Conduct routine personnel activities
- Maintain inventory of the ACCC

### Operational Support/Finance Group:

The finance team will carry out its activities to manage financially the day-to-day operations of the ACCC and complete accounting activities relating to oil spills. These activities include:

- Routine accounts receivable, payable and payroll
- Manage ACCC finances
- Calculate and invoice response costs for past spills
- Budget preparation and monitoring activities

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### Technical Response & Planning Group:

The Technical Response/Planning team will operate in several areas:

Participating with other teams in developing NIIMS-ICS planning concepts for spill time activities.

Planning technical response activities for spills and drills .

Conduct training either internally or in concert with existing Alaskan higher education entities.

Conduct research on special technology appropriate for the cooperative team, including but not limited to: fishing vessel response capabilities, evaluation of unique Alaska resources and oil spill response techniques particularly appropriate for Alaska. This technology development would be partially by staff and partially in association with Alaska research organizations, e.g., University of Alaska, Prince William Sound Science Center, the spill technology review council etc.

Environmental assessment of past or potential spill sites not already accomplished by other organizations.

Interact with the state, federal and academic/scientific/engineering communities and environmental groups.

When the spill bell rings, the ACCC shifts immediately to the response mode and all non-essential activities are set aside so that the maximum response effort can be implemented.

### RELATIONSHIP OF THE ACCC WITH EXISTING ALASKA COOPERATIVES

In the aftermath of the *Exxon Valdez*, Alyeska developed an extensive spill response capability, including its Ship Escort and Response Vessel Service (SERVS). SERVS is the largest and best equipped oil spill response organization at this time in the United States.

SERVS was established by Alyeska to prevent spills through escort services and to respond rapidly to spills should they occur. SERVS is a large, well equipped response organization whose major but not entire focus is directed at fast containment and removal at the site of a tanker spill. SERVS is a cooperative in as much as Alyeska, its parent company, is a cooperative. Alyeska and SERVS have limitations placed on themselves regarding long-term response, geographical distribution of personnel, transition of response management and transition of SERVS role back to vessel escort duties.

These restrictions, whether externally or internally generated, create gaps and needs that the ACCC proposes to fill. These perceived gaps are:

1. The 72 hour transition from Alyeska to North Slope Crude Oil Tanker Operator management.
2. A mandate to respond only to spills of North Slope crude oil.
3. The limitation of response activities to spills inside Prince William Sound.
4. A greater focus on response near a spill source than on shoreline protection and nearshore response programs.

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The ACCC proposes to be the entity to complement the oil spill protection provided by SERVS by filling several of these gaps.

The 72 hour transition gap effect will be minimized by the ACCC Contract Vessel Program.

The SERVS focus on response at the site of a stricken tanker will be complemented by the ACCC's emphasis on shoreline protection and nearshore removal.

The ACCC will take the primary response role for non-crude spills throughout most of the state.

The problem of spill response outside of Prince William Sound will be mitigated by the statewide scope of the ACCC.

Cook Inlet Spill Prevention and Response, Inc. (CISPRI), is a true Class A Oil Spill Cooperative with the key requirements of a professional manager, pool of response equipment, professional core staff and response backup from member companies. It is a rapidly growing oil spill cooperative that serves the oil production, refinery and transportation industry in Cook Inlet. Its scope is broader than that of SERVS and covers all the roles normally carried out by a cooperative.

The interaction of the ACCC with CISPRI will have to be negotiated more carefully than with any other cooperative. The January 1992 spill in Cook Inlet indicates that spill response could benefit from the ACCC and CISPRI supporting one another — especially in the area of providing local vessels to support CISPRI's efforts.

The interaction of SERVS, CISPRI and the ACCC is shown pictorially in Figure 6. The role of these entities are shown by circles. The shaded areas between CISPRI and the Alaska Coastal Community Cooperative and SERVS shows those areas of operations where either or both organizations could operate.

Negotiation between the cooperatives, their member boards and others will indicate where boundary lines or beneficial supportive duplication is desired.

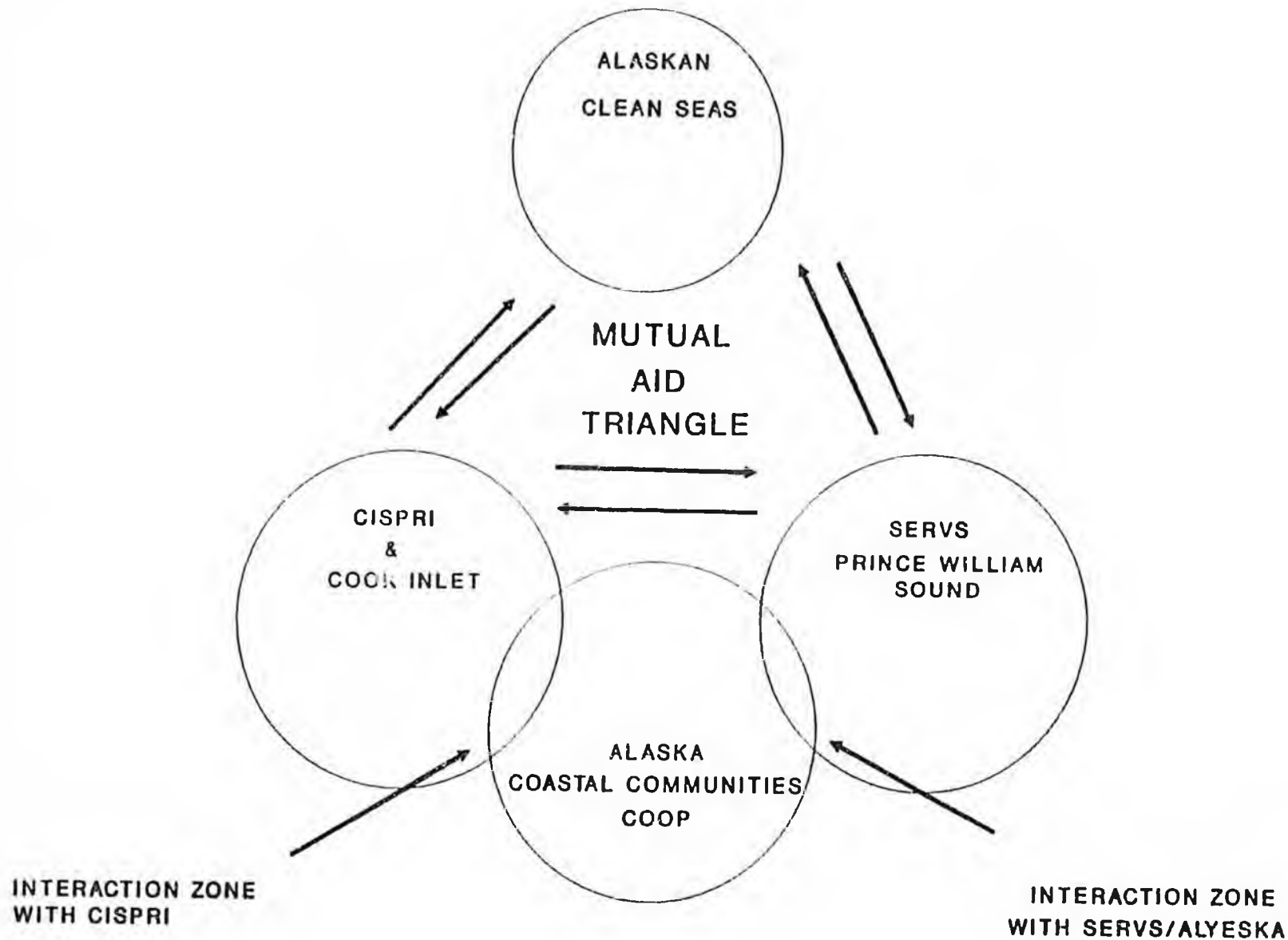
For example, Alyeska currently places equipment resources in storage in several coastal communities. Deployment is now expected by SERVS contractors who may or may not be in the local communities. With the development of the ACCC, Alyeska may choose to place this equipment and the responsibility for its deployment with the ACCC.

The Alaska Clean Seas Cooperative operates almost entirely in the North Slope/Beaufort Sea area. The ACCC's only perceived interaction with ACS, except in the area of mutual aid, would be in the event of a fuel spill in their region under circumstances not covered by a major oil company or by Alaskan Clean Seas.

A new spill cooperative, Southeastern Alaska Petroleum Response Organization (SEAPRO), has recently been established in Southeast Alaska. It is primarily a mutual aid cooperative (Class F) at this time, but contemplates buying equipment in the future. When the ACC becomes a reality, SEAPRO may with its original format.

FIGURE 6

INTERACTION OF THE ACCC WITH SERVS, CISPRI AND ACS



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## THE SUPPORT VESSEL CONTRACT PROGRAM

Local fishing fleets and other vessels proved to be indispensable during the *Exxon Valdez* spill response. Since that time, the efficacy of using fishing vessels for spill response has been recognized in other parts of the country. For instance, an organization called the Fisherman's Oil Response Team (FORT) is now in operation in the Clean Seas operating area near Santa Barbara, California. The Clean Sound (Washington) and Clean Coastal Waters (southern California) cooperatives have also budgeted funds for fishing vessel support programs.

Although the need to use local vessels became quickly apparent during the *Exxon Valdez* response, the methods for doing so were inefficient and inconsistent. In particular, the system of individual contracts between Exxon or its contractors and the vessel operators left much to be desired. Subsequent contracting procedures between Alyeska and vessel operators have solved some, but not all the problems.

Currently, individual contracts are negotiated between fishing vessel owners and both Alyeska and individual North Slope Crude Oil Tanker Fleet Operators for support services during an oil spill, from a TAPS tanker. This is necessitated because Alyeska's contracts with fishing vessels are not transferrable to the Tanker Fleet Operators, who will be taking over from Alyeska 72 hours into the response. One can easily foresee the potential for disruption of spill response efforts due to contractual difficulties arising from this two-tiered process.

Furthermore, another set of contracts is required for vessels to participate in Cook Inlet spills managed by CISPRI.

Creation of the ACCC would alleviate all these problems by simplifying the process. As the contracting entity for the fishing and other vessels to be used on oil spills throughout coastal Alaska, the ACCC can provide one-stop shopping for other responders in need of the services of local vessels. We anticipate the ACCC would have in its reserve most of the vessels appropriate for spill response activities, and an extensive data base of all pertinent specifications of those vessels. This will allow ACCC to provide boats with the characteristics the responder needs without delay.

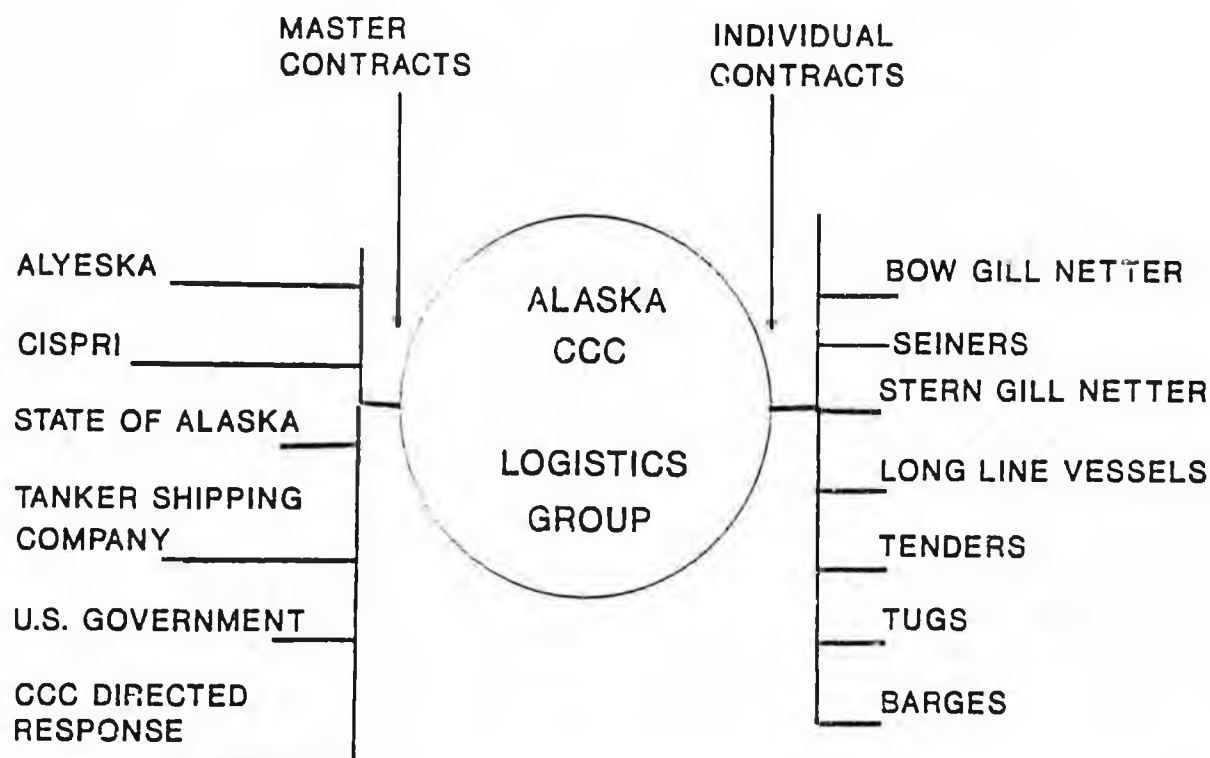
Figure 7 shows how the vessel program would work. The ACCC would contract with each vessel owner for services based on guidelines established by its governing board. These contracts would provide for the vessels to be assigned to the spill responses of whatever company contracts for the ACCC's services. If a transition occurs from party 1 to party 2 and both have contracts with the ACCC, the continuity of the vessel service is accomplished.

In carrying out the vessel contract program the cooperative will follow several basic guidelines:

1. Compensation will be realistic in terms of costs incurred and activities foregone by participating in drills or spill response. For example, if a spill occurs during a short and valuable fishing season, and the vessel operator is asked to forego this fishing opportunity, he/she should be reasonably compensated for the loss of this higher pay activity. Conversely, during other times, compensation would not include any such premiums.
2. During a spill response, vessels in the program will operate pursuant to NIIMS-ICS command structure. Industry's concern that vessel operators contracted for services will carry out their services under the designated command structure will be addressed by a contract provision obligating vessel operators to do so.

FIGURE 7

## VESSEL CONTRACTING PROGRAM



3. Vessels provided under the program to a spill response would be instructed to remain on spill duties until relieved or replaced by a suitably equipped vessel and a properly briefed crew in order to provide assurance to the responder that vessel owners will not come and go as they please.
4. Participation in the program will be based on criteria including vessel specifications, crew qualifications, and past performance. All geographic areas will be represented in the program. The use of such criteria is intended to provide the highest level of services possible, while eliminating the potential for geographical or other favoritism or other unfair practices.
5. The ACCC would expect its members and other responders to route all requests for local vessel support services through the ACCC so long as the cooperative has the ability to supply the vessels needed.

### EQUIPPING THE COOPERATIVE

A preliminary capital acquisition plan has been prepared for the ACCC to identify equipment resources that will enable ACCC to accomplish its mission and are compatible with its resource base. The priorities for selecting equipment were identified as:

- 
1. Nearshore protection equipment consisting of booms, anchoring systems and related components placed with or purchased by the ACCC to protect sensitive areas or to deflect spilled oil toward natural holding bays (also known as "keeper beaches") or into recovery equipment.
  2. A fleet of mini-barges that can be moved by fishing vessels for temporary storage of recovered oil, which would also serve for other shoreline protection and nearshore response needs.
  3. Skimming equipment, booms and other equipment that matches the space, hydraulics and weight limitations of fishing and other support vessels.
  4. Equipment comparable to that which might be brought to Alaska from the outside in the event of a catastrophic spill, primarily in order to train local personnel how to operate such equipment
  5. Equipment suitable for response to spills in harbors and ports.
  6. Equipment necessary to deploy equipment placed with the cooperative by Alyeska, the state, the federal government or tanker owners and operators (e.g., deployment vessels, loading ramps, cranes).
  7. Equipment and facilities for the response bases.
  8. Communication equipment.
  9. Equipment for safety, engineering and scientific operations, such as explosion meters, meteorological equipment, laboratory equipment, cameras and video recorders, etc.
  10. Response vessels equipped with skimmers and boom for fast first strike response activities.

Operationally, the plan consists of:

- Local first response strike forces for fast deployment at high risk locations.
- Equipment for up to 50 task forces comprised of two to six boom deployment vessels, two seiners with mini-barges, boom, skimmers, transfer pumps and auxiliary equipment.
- Three heated oil storage barges to receive oil from mini-barges.
- Equipment for approximately 30 local depots.
- Equipment for modest levels of shoreline cleanup operations.
- Equipment for field measurements for safety and operations support

The details of the equipment acquisition plan are being documented in a separate report. Final selection would be made under the direction of the ACCC Board and its Technical Advisory Committee.

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## SECTION IV: TECHNICAL DEVELOPMENT AND TECHNICAL RESPONSE TRAINING

A major role of the ACCC is to create a large, trained reservoir of Alaskans able to staff a response to a major oil spill. In order to accomplish this, the ACCC must provide for training of its core staff, support vessel operators and crews, and other workers and volunteers in such subjects as oil spill response methods, NIIMS ICS, firefighting, safety and hazardous waste operations and emergency response (HAZWOPER). There are, of course, other people who need similar training, including state and federal agency personnel and industry employees. This training can either be offered in Alaska or individuals could be sent to out-of-state training courses.

Practically speaking, though, the large numbers to be trained (e.g., in the thousands) make attendance at courses in the lower 48 a complex and overly expensive proposition. Also, lower 48 training courses could not be expected to give much emphasis to the technology needed for Alaska, while an Alaskan course could be tailored to apply specifically to Alaskan conditions and technology appropriate to meet those needs.

Training in oil spill control and hazardous spill operations can be extremely costly if the courses are offered by a group that must provide both equipment for hands-on work and staff outside the context of a spill response organization (either cooperative or independent business). Training as a function of the cooperative allows response equipment to be used for training and vice versa. Teaching a diverse group of trainees also helps keep the organization technically sharp and is a productive activity during periods between spills.

The training program suggested for the ACCC will focus on the unique needs of Alaska, its environment, its industries and the ACCC. The main training center will be located at one of ACCC's main equipment bases in order to facilitate access to a large inventory of equipment. The program will have both classroom and hands-on components. In order to ensure high quality and take advantage of existing resources and expertise, we recommend that the program be integrated with local education institutions — perhaps Prince William Sound Community College, the University of Alaska's Marine Science Institute, the Alaska Vocational Training Institute, the University of Alaska Kenai campus, or some combination of these. In this setup, ACCC training staff would become adjunct staff of the college or university.

Training courses would also be offered in coastal communities throughout Alaska. These courses will likely focus on basic spill response, hazardous spill response training, training for local administrators to show how to work with or use the cooperative, first response training drills at specific industrial facilities, and training of local vessel operators in the deployment of ACCC's response equipment.

It is our intent that ACCC's program work with and supplement the activities local academic organizations. The programs will be patterned after the successful programs offered since the early 1970's at the Texas A&M University's Oil Spill School at Galveston, Texas, the Occupational and Environmental Safety and Firefighting courses and associated programs in College Station, and the National Spill School at the Texas A&M's Corpus Christi State University.

Texas A&M's new Center for Oil Spill Technology is coordinating the training activities described above., as well as Texas A&M's Oil Spill Technical Response Program. The University is available to assist in developing ACCC's training program, including prepackaging instructional and visual aid materials, curriculum, and instructors.

Table 5 shows a tentative list of course topics to be considered for development. Some courses would be given throughout the year, while others would be given on an annual or as needed basis.

**TABLE 5: POTENTIAL TRAINING COURSES**

**Main Training Facility**

**A. Oil Spill Control**

1. Basic 40 hour course in oil spill technology
2. Shoreline protection and nearshore containment and removal strategy (24 hr.)
3. Shoreline cleanup methods
4. Initial response methods for terminals and vessels
5. Deployment of sweeps and skimmers (classroom course)
6. Deployment of equipment (hands on exercise)
7. Handling oil spill residues
8. Other oil spill response technologies: dispersants, burning bioremediation, etc.
9. Response simulations/drills
10. Maintenance of oil spill equipment
11. Training for local administrators

**B. NIIMS Incident Command System**

1. Basic concepts
2. Operational concepts
3. Operational support
4. Technical response/planning

**C. Hazardous Waste Operation and Emergency Response**

1. 40 hr. HAZWOPER
2. 24 hr. hazardous response with additional emphasis on Alaska Environmental Hazards
3. Shorter term hazardous response
4. Wilderness survival, frost bite, hypothermia, heat exhaustion and other safety concerns.

**D. Marine Firefighting**

**Community Training Courses**

Courses A1, A4, A11 and A6 from the list above, as appropriate with emphasis on locally based equipment. Courses B1, C2, C3 and C4, as appropriate

## FINANCIAL ASPECTS OF THE TRAINING PROGRAM

The costs of training ACCC staff, contract vessel crews and local residents will be funded from the core budget. If state agency personnel, industry employees or others request training, tuition would be charged. Thus, the training program could be partially self supporting:

## EQUIPMENT FOR TRAINING

Equipment and supplies for the training program will fall in three major categories:

- A. Equipment from ACCC's main response inventory (for example, the booms and skimmers that would be used by manual operators.
- B. Equipment obtained to train ACCC personnel in the use of equipment that might be brought to Alaska during a response to a catastrophic spill (e.g., the Navy's Mark 5 skimmers; the Coast Guard's skimming barriers, etc.).
- C. Visual aids, laboratory equipment, safety equipment, personal protective gear, etc. needed specifically for training programs.

## TECHNOLOGY DEVELOPMENT PROGRAM

The remote nature of Alaska, its vast coastal shoreline, the importance of its marine resources and the unique spill response technology needed for oil spill control make it extremely important that the ACCC have at least a modest research program.

The purpose of this program is not to compete or duplicate the major research programs of the federal government, or of the industry's MSRC. Rather, ACCC's program would be undertaken to assure that the technology developed in these other programs is adapted for use in Alaska.

The technology development program would be under the leadership of a research director who would report to the director of the technical response/planning section. This individual would be qualified for an adjunct or research faculty position with either the Sea Grant program or Marine Science Institute of the University of Alaska and have the ability to submit research proposals through the University for projects to be carried out by the cooperative.

The technology development program is expected to be partially self-funded through external financial support.

Potential projects for initial study are:

1. Investigation of optimum boom characteristics and techniques for vessels of different sizes, horse power and configuration.

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2. Determination of most practical configurations and techniques for towing temporary storage barges behind fishing vessels.
  3. Optimum equipment and techniques for transfer of recovered oil from temporary storage barges to larger barges or other vessels.
  4. Characteristics of shorelines at risk from refined product spills in areas not included in other surveys by either government agencies or industry.
  5. Options for disposal, reuse, or recycling of recovered oil, oiled debris, and used response equipment in Alaska.
  6. Design of interim storage areas for recovered oil and debris.

### TECHNICAL RESPONSE/PLANNING PROGRAM

The Technical Response program will include planning, training, and technology development. The Technical Response/Planning program will involve a trained local reserve and volunteers just like the cleanup side of the response. This reserve will use individuals with legal, business, scientific and engineering backgrounds and also will utilize Alaska's academic, scientific and research organizations and/or consultant capabilities. Specifically the program will utilize the University of Alaska and the Prince William Sound Science Center.

The program's responsibilities during non-spill periods will include development and updating ACCC's response plan; development of interim storage areas for use by ACCC; background scientific and engineering studies needed for response planning; permit acquisition; development of a safety program for ACCC, training; and technical development.

The technical response program will assure that the necessary technical and environmental information is brought into ACCC's response planning and operations.

The ACCC is expected to combine Planning and Technical Response activities. During the spill, the Technical Response group will carry out the activities listed in Table 6 in conjunction with their appropriate role in a spill response.

After the spill response is completed, the Technical Response group will continue activities of documentation, damage assessment, monitoring of restoration, litigation support, and archiving of information so that the current Response Plan may be upgraded based on recent experience.

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TABLE 6: TECHNICAL RESPONSE ACTIVITIES DURING A SPILL RESPONSE

- Mobilize technical response
- Determine properties of spilled material
- Predict changes in spilled materials
- Predict the movement of spilled materials
- Provide local knowledge and technical advice on response methods and strategy
- Contribute to development of the written response plan that details the response activities to be accomplished on a day-to-day basis (including methods appropriate for different ecosystems)
- Predict and measure shoreline impacts
- Provide information on response resources
- Measure effectiveness of response equipment and methods
- Quantify oil recovery rates and volume of oil remaining
- Ensure that ACCC responders have information on ecological aspects of the spill
- Assist in negotiations with federal and state agencies and environmental groups
- Assist with public relations activities
- Document the event, impact zone, and response
- Conduct on-site training (e.g., safety, response techniques, or new technology )

ACCC would not undertake all of these functions in every response in which it participated. The decision would be governed by the nature of ACCC's role in the response (i.e., whether ACCC was acting as a response action contractor under the direction of a responsible party or as the principal responder to a mystery spill under its jurisdiction. In any event, ACCC technical advisors would undertake the role of translating scientific or technical guidance from external sources into operating directions for the personnel under its management.

## SECTION V: FINANCIAL ASPECTS OF THE ACCC

### GENERAL FINANCIAL CONSIDERATIONS

The overriding financial issues for the ACCC are how much funding is needed and where will the funding come from? Before addressing that, however, it is best to consider the funding needs of oil spill cooperatives, which generally fall into three categories:

- Capital equipment and facility funds.
- Routine operating funds.
- Operating funds during a spill response

The first two can be predicted and budgeted for, but the latter can be determined with accuracy only at the time of a spill. In order to avoid the situation currently facing MSRC, we have set out all assumptions on which financial predictions are based and compared our predictions with actual operating budgets of similar cooperatives. (MSRC, when first proposed as PIRO in 1989, had a five year budget of between \$255 and 345 million. MSRC's budget is now projected at over a billion dollars for the same period.)

The budget for the ACCC is targeted at a capital equipment and facility value of \$30,000,000 and an annual operating cost of \$6,000,000 when fully equipped and operative.

There are two ways to develop a projected budget for ACCC. The first is to estimate a cooperative's budget is to look at other cooperatives with similar missions and geographical scope, and make a logical comparison between those cooperatives and the one you are contemplating. The second way is to build the capital and annual operating budgets item by item and total the costs. This report uses both methods, as a means of cross-check the validity of the figures. The costs for the ACCC derived using these two methods were remarkably similar.

A detailed item-by-item capital budget has been developed by the author as a separate work product. In this analysis, the costs of four major categories of capital resources were investigated:

- A. Shoreline protection and nearshore response.
- B. Shoreline cleanup response support.
- C. Response depots and centers for refined product spills.
- D. Support facilities and equipment base.

Shoreline protection and nearshore response includes equipment necessary to operate in four modes.

1st Mode - Fast response for protection, containment and removal with core vessels and equipment

2nd Mode - Reserve team and contract vessel deployment of shoreline protection booms and related equipment.

3rd Mode - Reserve team collecting oil deflected and consolidated by shoreline protection teams.

4th Mode - Reserve team working on open water containment and removal.

The suggested shoreline cleanup and response equipment includes a modest amount for shoreline restoration, such as would occur on small crude oil spills or a product spill, while major shoreline cleanup would be left to contractors hired by the responsible party.

The response depots and centers for refined product spills provide the equipment for first strike protection, containment and removal by local strike teams using ACCC core vessels and reserve teams using contract vessel equipment. The support facilities and base equipment consists of buildings, storage areas, special docks or dry docks, shop equipment, offices, etc.

The budgets for these components for the statewide program are:

	Capital Value Millions
Shoreline protection and nearshore response	18.0
Shoreline response support	3.0
Product spill response centers equipment/supply inventory	5.0
Onshore bases, depots and support facilities	4.0
Total	\$30.0

This equipment may be acquired by purchase, assignment from member entities, or resources maintained by others that would be made available in response to a spill.

This capital equipment level is on a par with the larger spill cooperatives on the West Coast. For example, the inventory of the Clean Sound Cooperative is \$31,000,000, of which \$22,000,000 has been spent since the Exxon Valdez and annual expenditures of \$6,000,000 per year for capital acquisition are planned. However, the ACCC is oriented less toward dedicated response vessels and more toward protection booms, storage barges and vessel of opportunity skimming systems that can be used to mobilize a large number of task forces comprised of existing local vessels. The capital equipment projection of \$30,000,000 for ACCC is substantially less than the reported \$200,000,000 inventory of SERVS, or the approximately \$400,000,000 inventory of the MSRC.

Operating budgets increase greatly as capital equipment inventories increase because of the costs associated with additional personnel, maintenance and insurance. Table 7 presents the operating and capital budgets and the present staff levels for three cooperatives.

**TABLE 7: BUDGET COMPARISONS OF THREE COOPERATIVES**

Coop Type	Operating Budget 1992	Capital Acquisition Since 1989	Total Capital Equipment	No. of Full-Time Staff	Ratio Operating Capital
B Delaware River/Bay	\$1,250*	\$3,300*	\$ 5,000*	1.6	25%
A Clean Coastal Waters	\$2,464	\$7,500	\$25,000	34.0	27%
A Clean Sound	\$3,180*	\$22,000*	\$31,000	34.0	10%

\*Note - Budgets in thousands

Recognizing that the type of equipment proposed for the ACCC is closer to that of Clean Coastal Waters in southern California but adjusting for magnitude, an operating budget of 20% of the capital expense inventory is appropriate. This would indicate a budget of 20% of \$30,000,000, or \$6,000,000 per year when the ACCC is implemented.

As a further comparison, the personnel level projected for the ACCC is between 45 and 50 full-time employees. Approximately 30 personnel would be in the Prince William Sound area; 10 in the Seward-Cook Inlet-Kodiak region, and 10 throughout the state. This personnel level compares closely with the 34 personnel of Clean Sound and Clean Coastal Waters after the 10 person training and technical component is added. The additional employees proposed for ACCC are necessitated by the wide geographic scope of the ACCC.

Clean Sound personnel are budgeted at a full-time equivalent (FTE) rate of \$51,400 for salary and fringe benefits. Applying an Alaskan differential of 15%, would result in an Alaska FTE of approximately \$60,000 per FTE.

Table 8 is a breakdown of the operating budgets of Clean Sound, Clean Coastal Waters and the ACCC. The table shows the budgets for personnel and facility expenses, technical support, equipment-related expenses, and insurance. A figure for supply inventory for ACCC was included because it is a necessary expense. It does not appear in the budgets of existing cooperatives because they have already created their supply inventory, or have substantial supplies available in their area. ACCC would have to build up its inventory of supplies over time.

**TABLE 8: OPERATING BUDGETS COMPARISON**

	Clean Sound 1992	Clean Coastal Waters 1992	ACCC
TOTAL	\$3,179,573	\$2,464,100	\$6,000,000
PERSONNEL	55%	51%	50%
FACILITIES	12%	10%	12%**
TECHNICAL SUPPORT	13%	9%	10%
EQUIPMENT RELATED EXPENSE	13%	26%	18%**
INSURANCE*	7%	4%	4%
SUPPLY INVENTORY	0%	0%	6%

\* For Director and Equipment/Supply Inventory

\*\* Includes amortization of some capital expenses

Table 9 shows the preliminary breakdown of the ACCC budget by percent.

**TABLE 9: PRELIMINARY OPERATING BUDGET FOR ACCC**

PERSONNEL EXPENSES	\$3,000,000
FACILITIES	720,000
TECHNICAL SUPPORT	600,000
EQUIPMENT	1,080,000
INSURANCE	240,000
SUPPLY INVENTORY	360,000
<b>TOTAL</b>	<b>\$6,000,000</b>

Table 10 outlines the core staff positions for the ACCC. These employees would be located throughout the state at locations to be determined later. This core group will carry out the day-to-day management, operations, logistics, finance and technical response activities of the ACCC, as well as the organization, planning, and training of the reserve of up to 2,000 individuals.

**TABLE 10: ACCC PERSONNEL LIST**

Director .....	1
Assistant Director .....	1
Secretarial .....	4
Operations Manager .....	2
Regional Response Specialist .....	5
Response Specialist .....	6
Vessel Captains .....	2
Mechanics .....	3
Oper Support Manager .....	1
Logistics Specialist .....	2
Vessel coordination .....	5
Finance Mgr .....	1
Bookkeeper/Purchaser .....	2
Technical Response Manager .....	1
Planning Specialist .....	1
Training Director .....	1
Training Specialist .....	2
Graphics/Vis Aid .....	1
Inst Tech .....	1
Research Director .....	1
Research Asst .....	2
<b>SUBTOTAL .....</b>	<b>46</b>
Reserve and volunteers .....	2,000
<b><u>TOTAL .....</u></b>	<b><u>2,046</u></b>

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The facilities budget includes office and warehouse rent, office maintenance, supplies, communications, vehicle expense, library, travel, taxes, moorage, etc.

The technical support budget includes professional services (engineering, legal, environmental, accountant), public relations, training for core staff and reserve, stipends and meals for trainees, internal response drill costs, and technology development.

The equipment budget covers equipment leases and licenses, repair, maintenance, modifications, fuel, etc.

Insurance expense covers director liability, general liability, equipment insurance, and other insurance that may be required.

### OPERATIONS BUDGET DURING A SPILL

When the ACCC's presence is requested at a spill, the organization will shift from routine operation to response activities. At that time, a new financial structure is implemented because the responsible party or government agency in charge will be billed for response costs. This will include regular and overtime personnel, consumable supplies, repair, contract vessel and other spill related expenses. To some degree, these funds will replace budgeted operating expenses for the period of the spill. These recovered costs will be escrowed for subsequent budgets or used to repay capital costs. After a historical record of response expenses is established, they may become part of a given year's budget projections. Similarly, funds generated by response drills, training, training fees and contract research may accrue to current or future year capital expense budgets.

The ACCC will need to obtain a commercial letter of credit or other reserve financing of about \$2,000,000 to be able to finance modest response efforts until repayment is received. For catastrophic spills, the ACCC needs a guarantee from its members and/or the State Oil and Hazardous Substance Spill Response Fund to permit financing of the spill response. This funding is essential because community resources, whether individuals, vessel operators, or businesses are not in a position to wait long periods for payment. Such a guarantee from the state is not unreasonable, since the state fund would pay for the expense if the responsible party or the federal government did not. The legislature may need to provide for this guarantee, at least up to the current fund level. California's oil pollution law provides that when its response fund is depleted, the state may borrow funds to replenish it until oil tax revenues replace the borrowed funds. A similar approach may be appropriate for Alaska.

### FUNDING SOURCES

Many opinions could be expressed on how to obtain and apportion the \$30,000,000 capital costs and \$6,000,000 annual cost suggested for the ACCC budget. The authors can only offer what they believe to be a reasonable plan as a point of beginning. First, it could reasonably be argued that Prince William Sound would be best served by using part of the Exxon settlement funds as a one-time stimulus to set up this perpetual cooperative to help protect and minimize damage to Prince William Sound in the future. An allocation of \$15,000,000 from the fund would achieve this purpose. Recognizing the politics that surround this fund, the financial plan hopes for this allocation, but does not depend on this source.

The capital budget could be achieved by the following formula:

Funds Provided by State participation	\$10,000,000
Funds Provided by the North Slope Crude Oil Tanker Operators & Cook Inlet Tanker Operators based on shipped volume	\$10,000,000
Financed by commercial loans or bonds	\$10,000,000
TOTAL	\$30,000,000

The following logic is suggested for this capital equipment budget.

The citizens of the United States have been charged for oil spill control in Alaska by means of a tax on Alaska crude oil. These funds are deposited in the Oil and Hazardous Substance Release Response Fund. It is reasonable that this fund be used actively to prepare for spill response rather than passively as an insurance fund to pay only for spill response. Thus, the use of the state funds to create this equipment base is warranted.

As dues paying members of the ACCC, the crude oil tanker operators will also pass on the cost of ACCC equipment to the users of Alaska crude in the lower 48. Part of industry's cost will be offset by the ACCC taking over some of the responsibilities industry has under Sections 4201, 4202 and 5005 of the Oil Pollution Act of 1990 and HB 567 and its implementing regulations. Industry may also choose to offset part of the capital cost by transferring equipment needed by the ACCC from industry inventory.

Borrowing of funds to obtain equipment is not the preferred method, but can be used. In this plan, the last \$10,000,000 of capital funds is borrowed from commercial sources. This debt would be retired from three sources.

1. Allocation or savings in the operating budget.
2. Fees earned for response or response drills.
3. Fees charged to the approximately 300 product transporters, pipelines, storage facilities, offshore platforms, etc., which will need the capability of the ACCC to meet the contingency planning requirements of HB 567. Charges totaling \$500,000 to \$1,000,000 per year as flat fees based on size and risk appropriate.
4. Part of the income generated by training fees from outside individuals and groups.

Exxon Valdez settlement funds can be used for measures to prevent further damage to natural resources, which arguably include oil spill prevention and response activities. In the event funding from the Exxon Valdez Trust Fund were available for this purpose, the crude oil tanker owners' share would remain at \$10,000,000, the State share would be reduced to \$5,000,000. The income sources mentioned above would be accrued to the operating budget, future equipment allocations or a response fund.

The Operations budget would initially be equally split between the State and the Crude Oil Tanker Operators, e.g., \$3,000,000 per year each.

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TIMING:

The nature of the Alaska coastline, the wide geographic range of the state, the high level of use and the large volumes of potential spills warrant the creation of the ACCC and its associated capital and operating budgets.

The capability needs to be in place now. Whereas lower 48 oil spill cooperatives have taken years to grow and transform into Class A cooperatives, the ACCC, like the MSRC, needs to initiate operations as a fully equipped cooperative. Some phase-in period will be necessary to allow for long lead times of equipment delivery, and to match personnel levels with the arrival of their response tools. However, this period should be on the order of months rather than years.

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## VI. SUMMARY

Alaska has come a long way since the *Exxon Valdez* spill. SERVS, Alyeska's response capability in Prince William Sound, has become the largest and best equipped response organization in the United States. CISPRI, the oil spill cooperative in Cook Inlet, has upgraded to become a first class cooperative. Alaska Clean Seas, which is the Oil spill cooperative in the Arctic has improved its operating format and equipment inventory, and the fledgling SEAPRO cooperative, is organizing in Southeast Alaska.

The organizational structures and response equipment necessary to initiate the first strike against major crude oil spills are largely in place. There are, however, a number of problems left unresolved by this network of industry cooperatives, including:

- The need for an implementation plan for shoreline protection and nearshore response.
- The need to equip and train local residents to respond to spills.
- The need to effectively organize, train and use the capabilities of the fishing fleet and other vessels.
- The need to protect against the very real problem of non-crude spills.

The Alaska Coastal Communities Cooperative (ACCC) provides a comprehensive and realistic solution to the major gaps in spill response in Alaska and provides a model for other states to follow. The failure to deal with these pressing needs has resulted in significant gap in the level of oil spill protection for coastal Alaska expected by the public and required by law. While these problems could perhaps be resolved in the context of the existing scheme, there has been a marked reluctance to do so. The establishment of an entity like the ACCC has demonstrable advantages, including simplicity, cost effectiveness, and public support.

### WHAT IS THE ACCC?

The ACCC, as currently envisioned, will be a statewide oil spill response organization with a core staff of professionals to perform response, training, planning and administrative functions.

The ACCC provides the means by which local resources and local knowledge are put to effective and timely use in a response. The ACCC will ensure that those who are closest to the spill, who have the most to lose if the spill response is not well executed, and who care the most about protecting the coastal environment, are involved in the response. In doing so, the ACCC will satisfy industry's obligations under state and federal law to involve local residents and provide an adequate response to spills.

ACCC's primary mission is to protect shoreline and nearshore resources any where in coastal Alaska. Its role in any given response may vary from primary responder to being part of a coordinated response managed by industry, the federal government or the state government. Secondary missions could involve coastal hazardous material spill response and marine firefighting support up to the training and performance of its core staff and volunteers.

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Among the major responsibilities of the core staff of ACCC would be to organize, train and coordinate local fishermen, spotter pilots, charter boat operators, local contractors and local residents who are interested in participating in future spill responses.

### WHY IS THE ACCC NEEDED?

The existing network of industry-based cooperatives has focused, with good reason, on initial response in the vicinity of the spill. Far less emphasis has been placed on the protection of shorelines and near shore areas. In addition, independent oil spill clean up companies are often relied upon in contingency plans. These companies are of limited value in remote areas because they are most often located so far away from the spill location. The contracts that companies have with these independent clean up companies is non-binding and there is no certainty of response. If they do respond the response time, equipment, and personnel they will bring to a spill is uncertain at best. The ACCC will be a known quantity with regard to equipment, personnel, and speed of response.

### HOW IS THE ACCC ORGANIZED?

The ACCC will be established as a non-profit organization. Its governing board will include representatives of industry, local community, state, federal, environmental and Native interests. It will also have a technical advisory board with similar, but broader membership. The board of directors would select a director to operate the ACCC on a day-to-day basis.

The ACCC will be organized according to NIIMS-ICS guidelines. Five sections will handle administrative support, spill response operations, logistics, finance and planning/technical response. In addition, using NIIMS-ICS guidelines will enhance ACCC's ability to coordinate with the other entities involved in spill response, including state and federal agencies and industry, which are also organized using ICS guidelines.

### WHERE WILL THE ACCC BE BASED?

The ACCC will have main bases in the regions of maximum risk. Spill specialists and coordinators would serve in Southeast Alaska, Prince William Sound, the Seward-Kodiak- Cook Inlet area, the Aleutians and Western Alaska. Depots of equipment and supplies would be placed throughout the state to supplement existing resources.

### HOW WILL THE ACCC FIT IN WITH OTHER ALASKA COOPERATIVES?

The ACCC is designed to complement the roles of the three major Alaska cooperatives. The ACCC will undertake those response activities which it is best suited to accomplish and which the existing cooperatives have not provided. In the interests of minimizing costs, competition and confusion, the ACCC's role is carefully defined to avoid duplication of existing services.

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## HOW MUCH WILL THE ACCC COST?

Obviously, the cost of the ACCC will be determined by the nature and scope of the mission it is given. The figures included in this report are based on an analysis of the personnel, equipment and ancillary services necessary to fill the gaps in the existing scheme for oil spill response in coastal Alaska. A capital budget of \$30,000,000 is proposed to equip the ACCC. \$6,000,000 per year is proposed for the operating budget once the ACCC is fully equipped. This level of funding is on a par with similar West Coast cooperatives with similar missions.

## WHO PAYS FOR THE CAPITAL AND OPERATING COSTS?

Both the capital and operating costs would come primarily from industry and the State Oil and Hazardous Substance Release Response Fund and from industry.

## WHO FINANCES ACCC'S ROLE IN AN ACTUAL SPILL RESPONSE?

Response costs incurred by the ACCC would be reimbursed by the responsible party, the federal Oil Spill Trust Fund, or the State Oil and Hazardous Substance Release Fund.

## WHAT ARE THE BENEFITS OF THE ACCC TO THE PUBLIC?

The public would benefit because a responsive oil spill organization will be in place to assist industry oil spill cooperatives when crude oil spills occur, and to respond or assist in industry's response to product spills. As a result, spill response will be better, and environmental and economic damage will be minimized.

## WHAT ARE THE BENEFITS TO INDUSTRY?

The ACCC deals with major industry spill response needs in an effective and economical way. It is not an industry pay-all proposal! The ACCC will help industry meet its legislative requirements but will be funded by both government and industry.

## WHAT IS NEEDED BY THE LEGISLATURE TO SUPPORT THE ACCC?

The Legislature needs to:

1. Pass a bill amending Title 46.08.110 -120, the Response depots and corps to change the definition to include coastal communities cooperatives and allow the Oil and Hazardous Substance Release Response Fund to provide response cost guarantees to permit ACCC response financing.
2. Allocate monies in the Oil and Hazardous Substance Release Response Fund to provide a portion of the capital and operating expense of ACCC.

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## RECOMMENDATIONS

There are legitimate needs in oil spill control in Alaska which have yet to be addressed. A do-nothing approach is clearly not acceptable given the present gaps in industry preparedness.

The ACCC is clearly a way to satisfy these needs. The ACCC has been carefully structured to be a reasonable and economical organization, which brings benefits to all parties in excess of the associated costs of the ACCC. Since the need exists now, it is recommended that the ACCC be fully implemented. An intermediate step should be pursued if this is not achieved.

If this can not be immediately achieved, an interim organization called the Alaska Coastal Communities Corporation should be created. This intermediate organization could be funded by industry, a state grant or both. The interim corporation would establish the initial board of directors, select a technical advisory board, hire legal, technical, and other consultants. Establish an office and begin the implementation of the foundation of the ACCC. This corporation would then transform into the ACCC when formal approval is received and funding provided.

## SOURCES

1. Task Force Report on Oil Spills, American Petroleum Institute (June 14, 1989).
2. Steering Committee Report and Recommendations on the Implementation of PIRO, volumes I and II, American Petroleum Institute.
3. Oil and Hazardous Substances Release Response Fund: 1992 Fund Allocation, Alaska Department of Environmental Conservation (February 1991).
4. Oil Spill Control for the 90's Course Manual, International Spill Technology Corp. (October 1991).
5. [put a name here and title], 1989-1992 Budget Information, Clean Sound Oil Spill Cooperative, personal communication with Dr. Roy W. Hann, Jr., [January 1992].
6. [name and title 1989-1992 Budget Information], Clean Coastal Water Oil Spill Cooperative, personal communication with Dr. Roy W. Hann, Jr. [date January 1992].
7. [name and title Oil Spill Contingency Plan and Budget Information], Delaware Bay and River Oil Spill Cooperative, personal communication with Dr. Roy W. Hann, Jr. [date January 1992].
8. The Oil Pollution Act of 1990.
9. Catalog: Hands On Training, Occupational and Environmental Safety Training Division, Texas Engineering Estuaries Service, Texas A&M University (1991).
10. 1992 Courses, The National spill Control School at Corpus Christi State University.
11. Nearshore Oil Spill Response Using Fishermen and Vessels of Opportunity: A Report to the RCAC, Ted Palmer (1991).
12. Graham Lascelles (December 1991). Lascelles, Graham, "The Recovery and Storage of Spilled Oil in the Nearshore Environment in Prince William Sound," (Dec. 21, 1991)
13. Valdez Oil Spill Technology: 1989 Operations, Exxon Production Research Co. (1990).
14. Fishing Vessel Analysis, Jean Buller (December 1991).
15. Tom Copeland, personal communication with Dr. Roy W. Hann, Jr. (June 1991).
16. A.D. Little, "Study of Non-crude Tank Vessels and Barges," Task 4 - Response Organizations and Depots (July, 1991).

Every analysis of the response to the Exxon Valdez spill noted the enormous contribution of local resources to that effort, and recommended in the strongest possible terms that local involvement be an integral part of future planning and response efforts. This report will not attempt to restate the reasoning behind their conclusions; rather we attempt here to focus on the means by which their recommendations can be implemented.

**SOUTHEAST REGIONAL OFFICE  
PRIORITY ISSUES AND TASKS  
FISCAL YEAR 92**

**Community Agreements with southeastern municipalities.** Ketchikan Gateway Borough signed. City of Ketchikan, City of Haines, Haines Borough, and a regional partnership with the Southeast Conference await signing.

**Incorporation of pollution prevention objectives into permits and enforcement actions.**

**Mixing zones for wastewater discharges for the AJ and Kensington Mines.**

**Renewals of federal discharge permits for bulk Alaska Pulp in Sitka and Ketchikan Pulp.**

**Air Quality Permits for Ketchikan Pulp, Alaska Pulp, the Kensington Project, the AJ Project, the Wrangell Sawmill, and the Green's Creek Mine.**

**Permits or Compliance Orders by Consent for solid waste facilities in Ketchikan, Petersburg and Wrangell.** All three communities are at critical junctures; baling or incineration, new or expanded landfills, liners or no liners, etc.

**Collection and disposal of household hazardous waste from southeastern communities.** The Southeast Conference favors a mobile system.

**Hazardous and solid waste management in remote camps.** A workshop in Sitka on February 18-19 is designed to avoid another "Rowan Bay."

**Public drinking water safety.** Technical assistance and enforcement to ensure monitoring compliance and solutions.

**Cruiseship smoke.** Binding agreements with cruiseship companies are expected to decrease problems in the summer of '92.

**Amendment of 29 Oil Spill Contingency Plans.**

**Investigation of contamination of Skagway Public Drinking Water Supply.** Low levels of trichloroethylene exist in the groundwater supply.

**Management of soils contaminated by diesel and gasoline.** Remediation to avoid problems and use remediated soils is the key.

## Summary Report of Northern Region Objectives/Activities

Regional and District Office staff implement the policies and procedures developed by the Commissioner and the central office staff, and enforce the department's statutes and regulations.

Major ongoing activities, by program, are as follows.

### Spill Prevention, Planning Management:

Work with the regulated facilities to ensure that each has an approved contingency plan consistent with the revised regulations.

### Contaminated Sites:

NPL Sites      Eielson AFB  
                    Ft. Walnwright  
                    Arctic Surplus  
                    Alaska Battery

FMUS  
UAF Power Plant  
Illinois/Minnie Connector  
Railroad Industrial Area

### Water/Wastewater Management:

Work with rural villages through the community agreements to improve monitoring and sampling compliance.  
Work with Cominco and EPA to get a year round NPDES permit in place for the Red Dog mine tailings pond discharge.  
Assist where ever possible in permitting for the Fort Knox project.

### Water Quality Management:

Work with the Corps of Engineers and the FNSB to resolve wetlands issues within the Borough (possible General Permit)

### Air Quality Management:

Implement modifications to the program necessary as a result of the CAAA 90.  
Healy Clean Coal Project  
Red Dog Ambient Air Lead

### Solid/Hazardous Waste:

Work with the FNSB in siting a new landfill.  
Work with the rural villages through community agreements to bring their landfills up to standard.

## MAJOR ACTIVITIES and CHALLENGES SOUTHCENTRAL REGION

- \* Oil spill prevention in Cook Inlet and other parts of the Region.

The recent KPL spill in Cook Inlet demonstrated vast improvement in oil spill response capability. The success of the response in terms of oil recovery is still being evaluated.

- \* Environmental Infrastructure in Rural Alaska

Solid waste, drinking water and wastewater present problems in most rural areas of the State. Steady and regular improvement on all Fronts is a high priority for the Southcentral Region.

- \* Fish Processing Industry

Fish processing is one of the largest industries in the Region. We will be making a special effort to assure consistent application of environmental requirements to both onshore and off shore Fish Processors.

- \* Leaking Storage Tanks and Contaminated Sites

The Southcentral Region includes a substantial portion of the urbanized areas of the State. A legacy of past practices, which we share with other parts of the country, is a large number of contaminated sites and leaking underground storage tanks. Progress in cleaning up these sites is a priority for the Region.

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ADMINISTRATIVE SERVICES  
FY 93 REQUEST**

	Federal Funds	General Funds	Other State Funds	Total Funds	PFT	PPT
FY92 AUTH.	\$ 253.4	\$1,603.2	\$ 270.8	\$ 2,127.4	39	1
FY93 REQ.	392.4	1,698.0	324.6	2,415.0	40	0
<b>CHANGE</b>	<b>\$ 139.0</b>	<b>\$ 94.8</b>	<b>\$ 53.8</b>	<b>\$ 287.6</b>	<b>1</b>	<b>(1)</b>

**PROGRAM DESCRIPTION:**

The Administrative Services Division provides centralized budgeting, accounting, fund administration, supply, payroll, personnel/human resource services, data processing support, public information services, and a Departmentwide Quality Control Section.

**PROGRAM CHANGES FY93:**

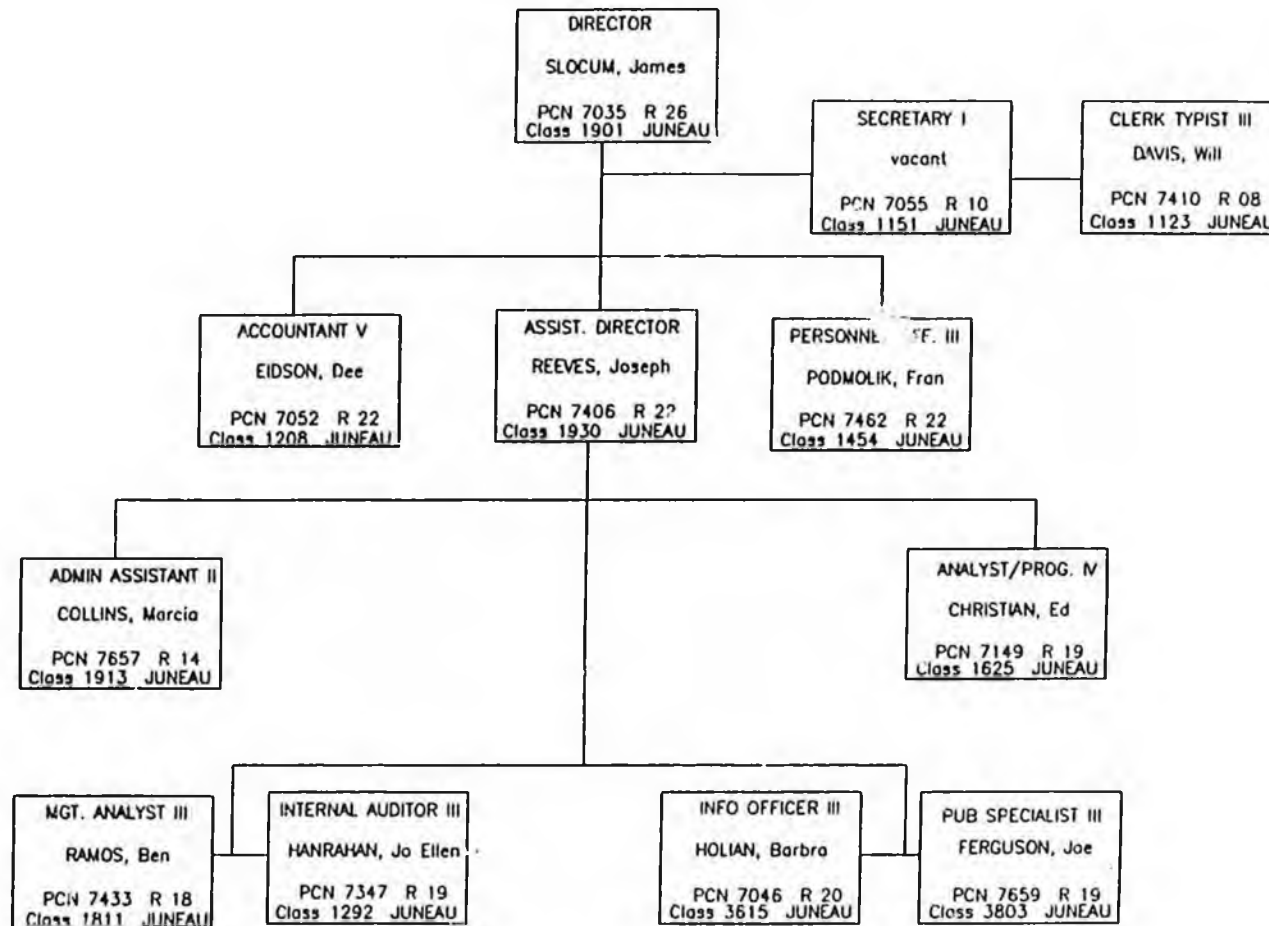
**Transfers Within Adjusted Base:**

- Personal Services funds were transferred to the Department of Education, Division of State Libraries to fully fund one PFT Librarian to provide support to the DEC Library. Previous funding provided via RSA.
- Transferred one PFT Risk Management Officer to SPAR's Spill Response Office to make safety personnel readily available to provide immediate technical safety assistance and expertise to the Department's responders statewide, or to respond to an incident when a situation warranted or was needed.
- Transferred in two PFT positions from EQ to meet reorganization goals of the Department which places emphasis for Public Information and Management Analysis in the Division to maximize efficiency.
- SPAR Division transferred in personal services to fully fund one existing accounting technician to support OHSSRF programs.

**Increment/Decrement Requests:**

- Due to general fund shortfalls within the Division's allocated operating budget, one PPT Information Officer working in the Office of the Governor's Media Center is being deleted. The assigned duties of this position will be picked up by other DEC information officers and the Governor's Media Center.
- To reduce the Division's high personal services forced underfunding, the Federal Indirect Recovery has been negotiated from 9.29 % to 19.63 % to enable State and Federal centralized program delivery commitments to be accomplished.

DIRECTOR'S OFFICE



Approved \_\_\_\_\_

DIRECTOR

DATE



Alaska Department of Environmental Conservation

Oil and Hazardous Substance Release

**RESPONSE FUND ANNUAL REPORT**

FISCAL YEAR 1991

Presented to the Second Session of the Seventeenth Alaska Legislature  
January 22, 1991 • Walter J. Hickel, Governor • John A. Sandor, Commissioner

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**OIL AND HAZARDOUS SUBSTANCE RELEASE RESPONSE FUND**  
**FISCAL YEAR 1991 ANNUAL REPORT**

January 22, 1992

# OIL AND HAZARDOUS SUBSTANCE RELEASE RESPONSE FUND

## FISCAL YEAR 1991 ANNUAL REPORT

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## OIL AND HAZARDOUS SUBSTANCE RELEASE RESPONSE FUND

### FISCAL YEAR 1991 ANNUAL REPORT

#### **Section I. INTRODUCTION**

The Oil and Hazardous Substance Release Response Fund, generally referred to as the "Response Fund", or "470 Fund" was created by the Legislature to provide a readily available fund for the payment of the expenses incurred by the State in the protection of the environment from the release, or threatened release of oil or hazardous substances" (AS 46.08.005). Each year the Department of Environmental Conservation (DEC), the Response Fund administrator, submits a report to the Legislature summarizing information on Response Fund expenditures, costs recovered, DEC response activities, projected expenditures, and any other information considered significant by the Commissioner (AS 46.08.060).

In May 1991, an internal DEC management audit of the Response Fund was completed which included recommendations for improving administrative procedures governing the Response Fund. Consistent with the recommendations in the audit report, a number of steps were taken in FY 92 to improve DEC's management of the Response Fund. Actions taken by DEC in FY 92 to resolve specific audit issues are described in Section II of this report.

A status report on Alaska's oil and hazardous substance spill response preparedness is given in Section III. Section IV provides information on FY 91 Response Fund allocations. FY 91 Response Funded activities are described in Section V.

## **Section II. RESPONSE FUND MANAGEMENT AUDIT UPDATE**

Since the release of the May 1991 audit report, DEC has taken several actions to improve management of the Response Fund. Although some issues continue to need improvement, many audit recommendations have been implemented and there are ongoing efforts to improve management of the Response Fund. The conditions described in the audit report, and corrective actions taken by DEC are outlined below.

### USE OF THE FUND BY OTHER AGENCIES

#### Audit Issue:

By statute, DEC is the State's designated Response Fund administrator (AS 46.08.010). However, DEC does not have full management and accounting control over Response Funds directly appropriated to other State agencies by the Legislature. There are no requirements to provide DEC with Response Fund accounting information from agencies receiving direct Response Fund appropriations. DEC can only manage, account, and report on Response Fund appropriations made directly to DEC.

#### Actions Taken by DEC:

DEC took the following actions to facilitate management control and to ensure statutory reporting requirements could be met:

1. Developed and incorporated standard reporting requirements into FY 92 RSAs between DEC and other agencies that use the Response Fund. Servicing agencies are now required to provide DEC with information that meets DEC's Response Fund reporting requirements, including contracts in excess of \$20,000, purchases in excess of \$10,000, and personal services expenditures.
2. DEC worked with the Department of Administration on fiscal controls to prevent other agencies from increasing an authorization to the Response Fund and "double booking" an appropriation from two Departments.
3. DEC requested that FY 92 Response Funds be appropriated to DEC instead of directly to other agencies. With the exception of two appropriations, all Response Funds went to DEC in FY 92. Direct appropriations were made to the Citizens Oversight Council and the Department of Transportation and Public Facilities.

### CLARIFICATION OF DEC ROLES

#### Audit Issue:

There is no single manager of the Response Fund. Too many people are charged with making decisions that impact the Response Fund. Management and internal control functions are not clearly assigned within DEC's Divisions, and Regional Offices. Uniform policies and procedures for the use and recovery of Response Funds have not been developed.

### Actions Taken by DEC:

The Spill Prevention and Response Division (SPAR) was established effective July, 1991. In FY 92, the Commissioner designated the Director of SPAR as DEC's Response Fund Manager. The Division of Administrative Services is responsible for internal fiscal control and Response Fund accounting reports. In FY 92 SPAR and Administrative Services will establish policies and procedures for use of the Response Fund by DEC and other State agencies. As the Response Fund Administrator, the Commissioner maintains ultimate oversight and control of the Response Fund.

### COST RECOVERY

#### Audit Issue:

Full cost recovery on the majority of incidents does not occur. Procedures for pursuing and monitoring cost recovery do not exist. Cost recovery information is difficult to obtain since revenue is not tracked by type, multiple identifiers are assigned to the same project, and revenue is not reconciled to incident cost. Cost recovery has not been fully pursued by DEC and information about recovery is difficult to analyze.

#### Actions Taken by DEC:

Procedures for cost recovery by DEC's regional office response staff are being developed by SPAR and Administrative Services. Current efforts to resolve accounting problems with cost recovery include:

1. Billing legal costs by incident.
2. Charging staff time to incidents.
3. Tracking revenue by recovery, penalty, settlement, interest.
4. Establishing one program and one administrative identifier.
5. Coding recovery to the incident where the cost originated.

### EQUIPMENT POLICY AND PROCEDURES

#### Audit Issue:

The condition, location, and current value of equipment purchased with Response Funds cannot be accurately documented. Ultimate ownership of the equipment is not clear. There are no procedures for managing Response Fund property. The State does not have a central listing of what equipment purchased with Response Funds is available to respond to an oil and hazardous substance release emergency.

#### Action Taken by DEC:

Equipment purchased by DEC with Response Funds is being identified on the state property system by a special fund coding. In addition, special Response Fund tags

are put on equipment purchased with Response Funds. The Division of Administrative Services maintains a master list of all equipment purchased with Response Funds, and will conduct an audit of the location, condition, and estimated value of Response Fund equipment during the second half of FY 92.

### Section III. ALASKA RESPONSE CAPABILITY

#### FY 91 and FY 92

Planning for State responses to catastrophic spills during FY 91 has improved the State's overall response capability. The State Master Oil and Hazardous Substance Discharge Prevention and Contingency Plan (State Master Plan) is currently before the State Emergency Response Commission (SERC) for approval. The State Master Plan governs the statewide response network for all State agencies with responsibilities under the State's Incident Command System (ICS). A working group of local responders, industry responders, co-op responders, ICS consultants, federal on scene coordinators (EPA and the Coast Guard), the Division of Emergency Services (DES) and other State agencies, reached a consensus with DEC on ensuring clear lines of authorities for responses to spill incidents by employing a unified ICS for spills/releases.

The Commissioners of DEC and the Department of Military and Veterans Affairs (DMVA) evaluated the opportunities for improved State emergency response coordination and agreed to co-locate staff in Anchorage to enhance both agencies' capabilities to plan for responses to catastrophic spills. Effective October 1991, DEC and DES staffs are now co-located at the State's Emergency Operations Center at the National Guard Armory at Camp Denali. Both agencies are working together to improve the State's capability to respond to catastrophic spills/releases.

A Memorandum of Agreement was signed in FY 92 by the Commissioners of DMVA and DEC which describes the responsibilities of DEC and DES during actual spill/release emergencies, or potential disaster emergency situations. This agreement will facilitate smooth cooperation and coordination between DEC and DES in the event of future spills/releases, and resolve the issue of "who's in charge."

During FY 91, response kits containing personal protective equipment were distributed to 49 DEC personnel throughout the State for their use in responding to oil or hazardous substance spills. In addition, 118 State personnel attended hazardous waste operations and emergency response training to respond to hazardous substance releases, including oil. A medical monitoring program is being revived to ensure that State spill responders are medically fit to perform their assignments and establish a baseline medical history which will be used to measure exposures to hazardous substances on an annual basis, if necessary.

A priority task yet to be completed is the establishment of emergency response depots and volunteer corps, training volunteers, and establishing regional hazardous substance response teams around the State. During FY 92 a hazards analysis is being conducted to serve as the basis for identifying preferred depots locations. The hazards analysis will identify areas at risk, vulnerabilities, and existing response capabilities. A strategy will be developed to address high risk areas with depots based upon the analysis. However, to address the most glaring communication gaps for catastrophic spill/release responses in remote areas of the State, a transportable communications system will be purchased in FY 92 with matching federal funds. Also, funds to train local responders are available in FY 92 from the Response Funds allocated to DES for response depots and corps.

Requests for proposals will be published in FY 92 to develop a pool of response action contractors who will be available to respond with pre-negotiated contracts in place during all times. This will improve the State's response time to control, contain, and remove a spill/release in the event a responsible party is unknown, unwilling, or unable to adequately respond.

Efforts to integrate all agencies in spill response are continuing through coordination of preparedness activities. The coordination of response preparedness activities with federal on scene coordinators, the Federal Alaska Regional Response Team, other State and local agencies, industry response co-operatives, and potential responsible parties has increased dramatically. Response Funds are used for participation by other State agencies in prevention, planning, and response activities. All these players are integrating their response systems and will come together in a unified command response to an incident. Sharing State and local human resources and equipment will improve the efficiency of response operations in the State.

### FUTURE PLANS

#### Spill Response Office (SRO):

SRO will become the State's most highly skilled and trained response team for hazardous substance release incidents throughout the State. The State's oil and hazardous substance release response team must have medical monitoring in place; be outfitted with state-of-the-art personal protective equipment; be in top physical condition; be trained on up-to-date response techniques and personal safety; be dedicated to working with each other as a highly trained team continually exercising and drilling their response skills. This team will function as the primary trainers for State and local emergency responders throughout the State.

As the designated State On Scene Coordinator (SOSC), DEC's four Regional Administrators are responsible for ensuring appropriate actions are taken to control, contain, and cleanup spills, and recover Response Fund expenditures for spill responses in their respective regions. The SOSC monitors a responsible party's (RP) response efforts, or those of a response action contractor funded by the Response Fund. SRO is available to assist DEC's designated SOSC in responding to oil or hazardous substance spills that exceed the regions capabilities to respond.

#### Response Depots:

State equipment purchased with Response Funds for responding to oil spills should be limited to equipment needed for the first few hours of a spill. State equipment must control and contain a spill until the responsible party mounts a response effort, or DEC's response action contractor arrives on scene with the resources to assume control. This equipment should be compatible with the federal response equipment and located near federal response equipment in high risk areas, or where both the State and federal government have concerns. Local responders should have access to the equipment and be trained in its deployment.

State equipment purchased with Response Funds for responding to releases of

hazardous substances should be limited to personnel protective equipment for trained State agency spill responders, and local professional responders who are part of a regional response team network. State response equipment for hazardous materials should be limited to control and containment until relieved by the responsible party's cleanup force, or DEC's response action contractor.

DES and DEC are working together to establish five depots in FY 93 which will be outfitted according to this strategy. Considerable expenditures of the Response Funds are anticipated for up to five years to ensure the State will be adequately protected.

#### Other State Agency Responders:

DEC will work with other agencies identified in the State Master Plan to identify specific responders and ensure they are properly trained and equipped to perform their duties in the State's ICS. Each agency that has a response role must make a commitment to this effort and designate personnel who would be dispatched to the State's ICS. Those personnel will then be trained in the State Master Plan and ICS, trained to perform the response duties to which assigned, and be outfitted with the appropriate response equipment. Once this basic level of preparations are met, all State agencies involved will drill and exercise together as teams. These drills and exercises will be integrated with federal and local resources, as well as potential responsible parties.

#### Prevention of Incidents:

The best strategy for investment of Response Funds is to take reasonable, cost-effective actions to prevent hazardous substance releases. Upon final adoption of industry contingency planning regulations, all industry oil spill contingency plans will be reviewed by DEC for compliance with the oil pollution control regulations. Inspections and investigations are expected to increase. Exercises and drills, including unannounced drills, will be conducted to verify that contingency plan holders can perform response activities as planned.

#### State Emergency Response Commission (SERC), and Local Emergency Planning Committees:

The SERC reviews and approves State and regional oil and hazardous substance release response plans prepared by DEC, and local response plans prepared by Local Emergency Planning Committees. Within the next few years local response plans will be completed for all of the State's Local Emergency Planning Districts. Through review and approval of government response plans, the SERC will continue to promote an organized and coordinated response to releases by the State and local organizations.

#### Hazardous Substances Spill Technology Review Council (HSSTRC):

The HSSTRC will establish a Memorandum of Agreement with the University of Alaska-Fairbanks, and the Prince William Sound Science Center's Oil Recovery Institute to develop a research and development program. The primary objective will be to develop State testing protocols for oil and hazardous substance technology. The HSSTRC will propose to the SERC guidelines for testing products during "spills of

opportunity". DEC staff will be responsible for implementation of the testing protocols adopted by the HSSTRC. DEC staff will develop and manage a State research and development tracking database which will be coordinated and shared with all interested parties.

#### Contaminated Sites Cleanup Management Plan:

DEC will complete a ten-year cleanup management plan by the end of February 1992 for approximately 1100 reported sites. The plan will lay out a systematic process for closing out all sites by the year 2002. That process will include a detailed review to confirm reported sites are contaminated, and remove reported sites from the list that are found not to pose a risk. The remaining confirmed sites will be ranked based on risk. The list will be further subdivided based on whether the responsible party for the spill is able to cleanup the site, or if the State must assume responsibility by default of the responsible party. Response Funds will be used to pay for staff to oversee responsible party cleanups, and pay for cleanups directly managed by the DEC using response action contractors. An action schedule will be developed for both the responsible party and state-lead category cleanups.

## Section IV. FY 91 ALLOCATIONS

DEC was appropriated \$27,000,000 in FY 91 to be used with \$9,000,000 of the June 30, 1990 balance of the Response Fund for the following allocations<sup>1</sup>. Additional direct appropriations to other agencies, fiscal notes, supplementals and revised programs were authorized totalling \$6,671,000<sup>2</sup>.

### DEC

State & Regional Contingency Planning <sup>1</sup>		\$ 461,900
State Emergency Response Commission, Local Emergency Planning Committees, Hazardous Substance Spill Technology Review Council (HB 566) <sup>2</sup>		\$ 550,000
Spill Response, Containment, Safety, Cleanup, & Cost Recovery <sup>1</sup>		\$ 1,920,000
DEC Spill Prevention and Response Preparedness (HB 567) <sup>2</sup>		\$ 1,371,000
Response Office, Depots, and Corps <sup>1</sup>		\$ 3,169,900
Spill Response Drills <sup>1</sup>		\$ 740,000
Site Investigation, Safety, Cleanup, & Cost Recovery <sup>1</sup>		\$ 2,632,900
Kenal Cleanup Project <sup>1</sup>		\$ 940,000
Exxon Valdez Project <sup>1</sup>	\$ 8,707,300	
Exxon Valdez Revised Program <sup>2</sup>	\$ 1,415,000	
FY 91 Total		\$10,122,300
Spill Reserve <sup>1</sup>	\$ 6,026,000	
Exxon Valdez Revised Program <sup>2</sup>	<\$ 1,415,000>	
FY 91 Total		\$ 4,611,000
DEC Supplemental Retroactive Pay Increase (HCS CSSB 161) <sup>2</sup>		\$ 256,800
<u>Other Agencies</u>		
Natural Resource Damage Assessment <sup>1</sup>		\$11,402,000
Exxon Valdez Oil Spill Litigation <sup>2</sup>		\$ 4,100,000
Citizens Oversight Council (HB 578) <sup>2</sup>		\$ 236,700
Department of Fish & Game Spill Prevention & Response Preparedness (HB 567) <sup>2</sup>		\$ 156,500

Tables are provided at the end of this Report with additional financial data as follows:

Table 1:	FY 91 Expenditures and Obligations
Table 2:	June 30, 1991 Response Fund Balance Sheet
Table 3:	Summary of Funding Sources and Oil Surcharge Account Deposits
Table 4:	Mitigation Account Summary
Table 5:	FY 92 Allocation Summary
Table 6:	Community Involvement Summary
Table 7:	FY 91 Contractual Payments Exceeding \$20,000
Table 8:	FY 91 Purchases Exceeding \$10,000
Table 9:	DEC Personal Services Expenditures

## Section V. FY 91 PROGRAM ACCOMPLISHMENTS

### A. STATE AND REGIONAL CONTINGENCY PLANNING

The State Oil and Hazardous Substance Discharge Prevention and Contingency Master Plan relies on the State's Incident Command System for directing State agencies that are responsible for responding to an oil or hazardous substance release. A public review draft of the State's Master Plan was released in October 1990 followed by a series of 18 public meetings held throughout the state to involve the public and provide an opportunity to comment on the draft plan. A revised draft was presented to the Legislature in February, 1991. The plan is currently before the State Emergency Response Commission for final approval.

The Department issued final regulations establishing the boundaries for ten regional planning areas. Regional plans for Cook Inlet, Prince William Sound and Southeast Alaska were begun by preparing resource information maps under an FY 91 Reimbursable Services Agreement (RSA) with the Department of Fish and Game.

### B. STATE EMERGENCY RESPONSE COMMISSION. LOCAL EMERGENCY PLANNING COMMITTEES. STATE HAZARDOUS SUBSTANCE SPILL TECHNOLOGY REVIEW COUNCIL (HB 566)

The SERC is responsible for oil and hazardous substance response planning at the state and local levels (AS 46.13.040). The SERC held four meetings during FY 91. Formal policies were established for reviewing and approving government contingency plans, establishing Local Emergency Planning Committees (LEPC), and training. During FY 91, the SERC approved five LEPCs (Ketchikan Gateway Borough, Northwest Arctic Borough, Prudhoe Bay, Matanuska-Susitna Borough, and Municipality of Anchorage), bringing the total number of approved local plans to ten.

Under the Federal Community Right-to-Know Act, the SERC is a repository for information submitted by businesses that store or use hazardous substances. During FY 91, DEC staff created a database to manage this information and make it available to the public. DEC also purchased a technical database containing information about health effects of hazardous substances and published a brochure to help raise public awareness about the program.

The HSSTRC exists within the SERC, and is responsible for recommending containment and cleanup products and procedures for responding to arctic and sub-arctic hazardous substance releases (AS 46.13.110). The first two meetings of the HSSTRC were held during FY 91. Formal bylaws and policies were adopted, and a chair and vice-chair elected at the meetings. During FY 91, DEC staff assigned to the HSSTRC investigated protocols for marine oil spill products. Staff assigned to the HSSTRC also maintains a vendor/product database, and manages an oil and hazardous substance technology for the HSSTRC and DEC.

C. SPILL RESPONSE, CONTAINMENT, SAFETY, CLEAN-UP, AND COST RECOVERY

Spill Prevention:

During FY91 DEC initiated a new oil pollution prevention program. Updated oil pollution prevention regulations were drafted for filing with the Lieutenant Governor's Office in FY 92. The regulations govern industry spill prevention plans as part of a facility's oil and hazardous substance release contingency plan. A technical workgroup of State and Federal agencies, public interest and industry representatives participated in development of the regulations and reviewed a contract to ECO Engineering for technical data and analyses on which to base new regulatory requirements.

Prevention Contract:

A request for proposals was published, and a contract awarded to ECO Engineering of Annapolis Maryland to prepare: (1) a list of prevention measures that DEC might consider for adoption in regulations, (2) methods to evaluate the effectiveness of prevention measures in preventing or reducing the size of spills, and (3) Realistic Maximum Oil Discharge (RMOD) sizes for different categories of oil operators.

NonCrude Oil Marine Transportation Contract:

Beginning in FY 91, DEC was directed to conduct a study and make recommendations to the legislature regarding oil discharge prevention and contingency planning for tank vessels and oil barges carrying noncrude oil in bulk as cargo. To assist the Department in that study a contract was awarded to Arthur D. Little, Inc. of Cambridge, Massachusetts on February 12, 1991. The contractor provided DEC with five products, including an inventory and database of noncrude tankers and barges operating in Alaskan waters; a list of environmentally sensitive areas in proximity to noncrude vessel routes; a list of response organizations and depots that could be accessed in response to a noncrude spill; and a report analyzing the information gathered. The contract was completed on August 2, 1991.

NonCrude Oil Terminal Facility Survey Contract:

As requested by the Legislature, DEC surveyed small noncrude oil terminal facilities regarding discharge prevention and contingency requirements for facilities with storage capacities of less than 10,000 barrels. Facilities were surveyed by DEC during April, May and June, 1991. To assist in the survey, a contract was awarded to ECO Engineering, Inc. on August 15, 1991. No expenditures were made in FY 91. The report will be completed during FY92 and presented to the Legislature.

Non-Catastrophic Spill Response:

Response Funds are used to hire contractors to initiate responses, or continue clean-up of spills when the spiller (responsible party) is unable or unwilling to respond. The Response Fund supports local response efforts to manage and monitor response efforts of the spillers or other responsible parties, and supports the Department of

Law's cost recovery actions. The program is responsible for spill data evaluation, as well as determining the staffing, equipping and training needed for the Department to effectively respond to all non-catastrophic spills. The spill response program responds to approximately 3,000 non-catastrophic oil and hazardous substance spills reported to DEC each year. Summaries of spills where Response Fund expenditures exceeded \$1,000 in FY 91 are included in Appendix A.

In addition, \$ 49,200 was expended by the Department of Law for assistance with recovery of costs to the Response Fund. Response Funds expended on spill response are recoverable if a responsible party is identified and is able to assume financial responsibility. Response fund recovery for each spill response on which Response Funds were expended are provided in Appendix A.

D. Spill Prevention and Response Preparedness (HB 567)

AS 46.04.030 requires DEC to certify oil discharge prevention and contingency plans for oil terminals, vessels, pipelines and oil and gas exploration and production facilities. The Department is required to review approximately 200 plans for these operations once every three (3) years. These plans cover approximately 400 separate vessels and facilities. Response Funds in this allocation are used for all contingency plan reviews conducted by DEC.

DEC inspects approximately 100 certified facilities, and approximately 100 certified vessels each year. The allocation funds the Department's inspection program to verify the effectiveness of industry's contingency planning and response preparedness.

Regulations for contingency plans and response planning standards were developed during FY 91 and filed with the Lieutenant Governor's Office in FY 92. Eighteen (18) public workshops and regular meetings of a technical working group were held to aid development of the regulations.

This Response Fund allocation also funds an RSA with the Department of Fish and Game (DFG) for plan review, participation in and evaluation of discharge exercises, and participation on related planning groups.

Financial Responsibility:

During FY91 DEC initiated a complete rewrite of the Financial Responsibility regulations to implement new legislation (AS 46.04.040). Financial Responsibility Program staff also reviewed 369 accounts, and answered hundreds of requests for technical assistance or other information about the program.

E. SPILL RESPONSE OFFICE, DEPOTS AND CORPS

Spill Response Office (SRO):

The SRO was established in FY 91 as a dedicated, highly trained team to increase the State's response capability to catastrophic oil and hazardous substance spills

(AS 46.08.100). Initial training of SRO personnel in oil and hazardous materials response was completed; safety standards and procedures were drafted; and minimum training standards and equipment needs for all State responders were established.

During FY 91, SRO worked to upgrade State and local response skills, knowledge and experience regarding hazardous substance releases. The SRO contacted local responders, and State and Federal Occupational Safety and Health Administration (OSHA) staff to identify training needs for local responders in first response activities.

The SRO also initiated the following actions in FY 91 for completion in FY 92:

1. Identify basic response equipment depots to be located in strategic coastal areas.
2. Coordinate potential locations for State depots with U.S. Coast Guard.
3. Establish baseline training needs and locate training sources for DEC's regional/district response personnel.
4. Purchase fifty individual response equipment kits for DEC's regional office responders.
5. Develop an Incident Command System (ICS) for a structured State response to oil and hazardous substance incidents.
6. Establish baseline criteria for medical monitoring of State hazardous substance release responders.
7. Develop safety guidelines and safety plans to be implemented by all DEC responders during response activities.
8. Commence training SRO personnel to become primary trainers for all State responders in the areas of Alaska Hazardous Waste Operations and Emergency Response, and Personnel Protection and Safety.
9. Prioritize training for its safety personnel to conduct OSHA required fit testing of all response personnel. Fit testing was started in FY 91 and continues as an ongoing program.

SRC Response Fund expenditures not associated with a particular spill are not recoverable. However, costs may be recovered in the future, as response personnel and equipment are used in spill response activities.

Corps and Depots:

The Division of Emergency Services (DES), Department of Military Affairs is responsible for establishing a volunteer oil and hazardous substance response corps, and emergency response depots (AS 46.08.110 & .120). In FY 91, DEC signed a RSA with DES to hire and train non-permanent staff to plan for depots and a volunteer response corps.

#### F. SPILL RESPONSE DRILLS

DEC is responsible for the review and approval of facility and vessel spill response contingency plans. All operators of facilities that store greater than 10,000 barrels of non-crude oil, or greater than 5,000 barrels of crude oil, all vessels that carry oil as cargo, crude oil pipelines, and oil exploration and production facilities must have a contingency plan approved by DEC to operate.

DEC can require two spill drills per year to test the effectiveness of certified facility contingency plans. DEC must also hold drills to test the effectiveness of the State and regional contingency plans. Drills may need to be repeated in cases where the drill uncovers problems with the contingency plan or its implementation.

In FY 91, DEC conducted seventy-one spill drills around the state. The level of drills varied. Some were telephone drills which tested procedures for emergency notification of contractors. Tabletop drills were used to test the response to spill scenarios created on paper. Some drills entailed a partial, or full response to test actual deployment and operation of response equipment and effectiveness of control, containment and cleanup procedures.

#### G. CONTAMINATED SITE INVESTIGATION, SAFETY, CLEANUP AND COST RECOVERY

The contaminated sites program investigates sites contaminated with oil or hazardous substances, and directs cleanup efforts by responsible parties or Response Fund contractors. DEC uses Response Funds to hire contractors to investigate and clean up sites when the responsible party is unable or unwilling to respond. Response Funds were used in FY 91 to manage and monitor response efforts of the responsible party and to fund the Department of Law for cost recovery.

In FY 91, DEC directly expended Response Funds in excess of \$1,000 on 14 contaminated sites which are described in Appendix B. Response Funds were also used for DEC's oversight of over 100 responsible party site cleanups.

In addition to FY 91 expenditures on specific site cleanups, \$10,900 was spent to complete a contaminated sites database and ranking model, and \$12,500 was spent for a public drinking water contaminant survey. In addition, a total of \$150,591 was expended by the Department of Law for assistance with Response Fund recovery for contaminated site cleanups.

DEC contracted with Shannon and Wilson, Inc. to make the Contaminated Sites Database application compatible with the newer version of Rbase in common usage on the DEC network, and to rank the total number of sites that exceeded the original list. At the time the original contract was written the database contained information on 330 sites. The final report submitted by Shannon and Wilson contained 905 sites. Work on the Contaminated Sites Database contract continued into FY 92.

Public water supplies have been found to be contaminated by Volatile Organic Chemicals (VOC's) which can cause adverse health effects. VOC contamination in

Alaska's small water systems may result from the following: (1) fuel is routinely stored very close to the water source; (2) leaking fuel lines are commonplace and often not identified for long periods of time because of snow cover or lack of record keeping; (3) the area around fuel storage tanks are not designed to prevent spills and leaks from seeping into the ground; and (4) fuel handling practices are poor in small communities.

During FY 91, Response Funds were used to test water for VOCs from approximately 500 public water systems serving fewer than 500 persons. In only two instances were VOCs detected at levels to warrant further sampling. All samples will be evaluated and scheduled for investigation should the detected levels persist. The Response Funds were used to purchase laboratory supplies, sampling containers and a student intern's time to prepare and mail the sample containers.

#### H. KENAI CLEANUP PROJECT

The purpose of the Kenai Cleanup Project is to implement an intensive effort within the Kenai Borough to investigate and clean up hazardous substances spilled in large part as a result of past industrial practices. FY 91 was the first year that response funds were used to support the Kenai Project. In previous years, general funds were obtained through the capital project budget process.

FY 91 expenditures supported Department of Law assistance with Kenai Cleanup Response Fund recovery actions. Response Funds were also used by DEC for the cleanup of contaminated sites where the responsible party was not known (appendix C), and for DEC's oversight of over 25 responsible party cleanups.

#### I. EXXON VALDEZ PROJECT

This project funded the State of Alaska's response to the Exxon Valdez Oil Spill during FY 91. Included were the Oil Spill Response Center (OSRC) in Anchorage and the SOSOC and his staff. The Departments of Fish and Game and Natural Resources response activities were funded through RSAs. Other agencies such as Department of Administration, Telecommunications, Department of Military and Veterans Affairs, Emergency Services, and Department of Transportation and Public Facilities received RSA funds to provide support services. The University of Alaska received funds to participate in science studies related to response needs. Numerous contracts were let to vendors in the State for services.

FY 91 activities focused on the Public Information office, monitoring in Prince William Sound and the Gulf of Alaska, a science unit, data processing support, documentation for both legal and historical purposes, and an administrative support section.

The 1991 cleanup season overlapped into FY 92; however, the planning and coordination were done during the winter of 1990-91. FY 91 accomplishments included the following:

1. Surveyed 588 beach subdivisions.
2. Identified 148 sites for treatment, including more than 50 based on specific State requirements above those established by the federal government.

3. Conducted assessment and cleanup operations with state workers at additional sites. This was "finish" work designed to eliminate lightly contaminated areas from future contaminated site designations.
4. DEC, DFG, and DNR prepared *State Response Plan: Guidelines and Requirements*, which codified State policies and requirements for cleanup.
5. At the State's request, members of local communities were included in the spring survey.
6. Bioremediation was refined and better targeted. State sponsored research and analysis helped ensure that State requirements for removal were met before fertilizers were applied.
7. State survey teams and science staff initiated and completed detailed maps of sites where subsurface oiling remained. Exxon later joined this effort and helped better define these sites for future monitoring.
8. DEC's OSRC science staff completed the shoreline survey project started in March of 1989. This three-year effort is the basis for the long-term monitoring programs at the contaminated sites.
9. Approximately 70 State identified beach subdivisions are scheduled for a Federal OSC sanctioned 1992 spring survey.
10. The SOSOC signed an agreement with Exxon for the transfer of Exxon Valdez oil spill response equipment in exchange for a \$693,000 deduction from Exxon's financial obligations to the State. The location, condition and estimated value of this equipment will be verified and used to increase the State's readiness and ability to respond to future spills.

#### J. NATURAL RESOURCES DAMAGE ASSESSMENT AND RESTORATION

The expenditure of funds on Exxon Valdez damage assessment and restoration played a crucial role in eventually arriving at the one billion dollar oil spill settlement agreed to in October 1991. Studies of the injuries resulting from the oil spill were continued in FY 91. Those studies helped determine what resources and services were injured by the spill and the extent of that injury. That information was necessary both for development of restoration actions and for development of a judicial action against the spiller.

Restoration planning was continued during FY 91. The planning effort assisted in development of restoration implementation projects and in the judicial case against the spiller. The largest part of the potential recoveries from a court case would probably have resulted from the cost of restoration activities. Accordingly, restoration planning made up a major component of the court case. Now that a settlement has been reached, emphasis will be placed on implementation of restoration projects that will benefit the spill affected area and the people that live and work there.

K. SPILL RESERVE

In FY 91 the spill reserve was used to fund DEC staff retroactive Response Fund eligible pay increases, and a revised program for the Exxon Valdez Project.

L. OTHER EXPENDITURES

DEC is not able to report on expenditures made in FY 91 appropriations made directly to other agencies including the Citizens Oversight Council and Exxon Valdez litigation.

Table 1

FY91 EXPENDITURES AND OBLIGATIONS RECORDED

(In Thousands)

<u>CURRENT YEAR AUTHORIZATION</u>	<u>Authorized</u>	<u>Expended</u>	<u>Obligated</u>	<u>Total</u>
<u>DEC</u>				
State and Regional Contingency Planning	461.9	419.9	42.0	461.9
Response Office, Depots & Corps	3,169.9	807.3	1,070.9	1,878.2
Spill Response Drills	740.0	448.5	291.5	740.0
Contaminated Site Investigation, et. al.	2,632.9	1,443.6	275.6	1,719.2
Spill Response, et. al	1,920.0	662.6	1,152.6	1,815.2
Exxon Valdez Cleanup	10,122.3	7,274.8	1,781.0	9,055.8
Kenai Cleanup Project	940.0	581.8	358.2	940.0
State Emergency Response Commission and Local Emergency Response Planning (HB566)	550.0	399.6	-8.5	391.1
Spill Prevention and Response Preparedness (HB567)	1,371.0	1,056.2	106.0	1,162.2
Spill Reserve	4,867.8	76.6	0.0	76.6
<u>OTHER AGENCIES</u>				
Spill Prevention and Response Preparedness (HB567) [F&G]	156.5	119.8	3.0	122.8
Citizen's Oversight Council [Legislature]	236.7	119.5	2.6	122.1
Exxon Valdez Litigation [Law]	4,100.0	4,100.0	0.0	4,100.0
Exxon Valdez Damage Assessment [F&G]	11,402.0	8,834.4	2,135.4	10,969.8
<u>Subtotal Current Year</u>	<u>42,671.0</u>	<u>26,344.6</u>	<u>7,210.3</u>	<u>33,554.9</u>
<u>PRIOR YEAR(S) AUTHORIZATION</u>				
<u>DEC</u>				
State and Regional Contingency Plan		136.8	0.0	136.8
Response Office, Depots & Corps		160.4	0.0	160.4
Spill Response, et. al.		27.6	16.4	44.0
Site Investigation, et. al.		228.1	0.0	228.1
Kenai Cleanup Project		1.9	0.0	1.9
Exxon Valdez Cleanup Project		4,702.9	3,684.2	8,387.1
Spill Reserve		237.0	0.0	237.0
<u>OTHER AGENCIES</u>				
Redoubt Volcano [DNR]		4.8	0.0	4.8
<u>Subtotal Prior Year(s)</u>		<u>5,499.5</u>	<u>3,700.6</u>	<u>9,200.1</u>
<u>GRAND TOTAL FY91 RECORDED</u>		<u>31,844.1</u>	<u>10,910.9</u>	<u>42,755.0</u>

Table 2

**BALANCE SHEET**

June 30, 1991

(In Thousands)

**Assets**

Cash	29,433.4	
Accounts Receivable <sup>1</sup>	2,897.4	
Total Assets		<u>32,330.8</u>

**Liabilities**

Payroll Exceptions	(13.9)	
Accrued Payable	1,100.8	
Warrants Outstanding	299.1	
Total Liabilities		<u>1,386.0</u>

**Fund Equity**

Reserve for Encumbrances	10,910.9	
Reserve for Prior Year Authorizations	117.7	
Fund Balance	19,916.2	
Total Fund Equity		<u>30,944.8</u>

Total Liabilities and Fund Equity		<u>32,330.8</u>
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<sup>1</sup> The Accounts Receivable is booked at the value of Response Fund expenditures submitted by DEC to Exxon which have been neither paid nor rejected. Total receivables from Exxon available through the settlement exceed that amount. DEC has recorded expenditures exceeding 52.3 million dollars. To date reimbursement has been received exceeding 30.2 million dollars. The balance of the monies recorded, as well as additional expenditures incurred shall be recovered and posted to the mitigation account upon receipt of settlement monies from Exxon. Additional monies shall be recovered and posted to the mitigation account for other agencies expenditures which have not been recovered to date. These monies shall be available for appropriation to the Response Fund.

Table 3

SUMMARY OF FUNDING SOURCES AND DEPOSITS TO OIL SURCHARGE ACCOUNT

1986 - 1991

(In Thousands)

Response Fund Source of Funding

Fiscal Year	G/F <sup>1</sup> Program Receipts	G/F Mitigation Account	Oil Surcharge Revenue	G/F Other	Total
FY87	0.0	158.7	0.0	522.0	680.7
FY88	0.0	304.3	0.0	825.0	1,129.3
FY89	10,000.0	136.5	0.0	10,500.0	20,636.5
FY90	20,000.0	197.6	0.0	32,600.0	52,797.6
FY91	0.0	1,696.1	27,000.0	0.0	28,696.1
FY92	0.0	0.0	28,500.0	0.0	28,500.0
Total	<u>30,000.0</u>	<u>2,493.2</u>	<u>55,500.0</u>	<u>44,447.0</u>	<u>132,440.2</u>

Revenue Collected Oil Surcharge Account

FY90	26,932.4
FY91	27,965.2
Total	<u>54,897.6</u>

<sup>1</sup> General Fund

Table 4

FY91 MITIGATION ACCOUNT SUMMARY

(In Thousands)

Summary of Revenue by Type

Site	Cost Recovery	Penalty	Settlement	Interest	Total
T/V Thompson Pass	0.0	35.0	0.0	0.0	35.0
Foss Maritime	0.0	0.0	300.0	0.0	300.0
T/V Tanana Chief	0.0	0.5	0.0	0.0	0.5
ARCO Alaska 2U	0.0	200.0	0.0	0.0	200.0
M/V Swallow	0.0	0.0	150.0	0.0	150.0
T/V Oriental Crane	0.0	0.0	12.9	0.0	12.9
F/V Snow King	0.0	0.0	1.6	0.0	1.6
Anchor Point	123.5	0.0	0.0	0.0	123.5
Tesoro Benzene	0.0	0.0	400.0	0.0	400.0
F/V Debra D	0.0	0.0	3.0	0.0	3.0
T/V Glacier Bay	0.0	0.0	700.0	0.0	700.0
Sitka Air Monitoring	0.0	5.0	168.0	1.5	174.5
Citigold	10.8	0.0	0.0	0.4	11.2
Exxon Valdez Project	2,413.1	0.0	0.0	0.0	2,413.1
Mapco	0.0	162.4	0.0	0.0	162.4
Total	2,547.4	402.9	1,735.5	1.9	4,687.7

Table 5

FY92 ALLOCATION SUMMARY

(In Thousands)

DEC

State and Regional Contingency Planning	395.9
Spill Response, Containment, Safety, Cleanup and Cost Recovery	3,934.3
State Emergency Response Commission	299.9
Local Emergency Planning Committees	600.0
Response Office, Depots & Corps	2,911.4
Hazardous Substance Spill Technology Review Council	296.1
Contaminated Site Investigation, Safety, Cleanup and Cost Recovery	3,655.0
Kenai Cleanup Project	807.0
Exxon Valdez Cleanup	4,126.0
Exxon Valdez Assessment and Restoration	12,474.4
Exxon Valdez Litigation	3,653.1
Arctic Marine Resources Commission	100.0
Spill Reserve	12,627.4
Prince William Sound Regional Citizens' Advisory Council Ballast Water Treatment Contract	175.0
Ncn Crude Tanker Study	30.0
<u>OTHER AGENCIES</u>	
Citizen's Oversight Council on Oil and Other Hazardous Substances	237.3
Ferries with Oil Spill Response Capabilities (SB165)	500.0
<u>Total Allocated</u>	<u>46,822.8</u>
<u>Appropriated to Response Fund</u>	28,500.0
<u>Fund Balance (Table 2)</u>	19,916.2
<u>Total Available to Allocate</u>	<u>48,416.2</u>

Table 6

FY91 COMMUNITY INVOLVEMENT SUMMARY

(In Thousands)

<u>Community</u>	<u>Exxon Project</u>	<u>LEPC<sup>1</sup></u>	<u>Response</u>
Kenai Peninsula Borough	465.9	30.0	0.0
City of Homer	12.6	0.0	0.0
Chenega Village	476.4	0.0	0.0
Tatitlek Village	138.0	0.0	0.0
City of Valdez	297.7	0.0	0.0
Kodiak Island Borough	394.7	9.3	0.0
City of Cordova	303.2	0.0	0.0
City of Whittier	529.1	2.5	0.0
City of Kodiak	0.0	0.0	60.2
City of Sitka	0.0	5.3	0.0
Ketchikan Gateway Borough	0.0	8.0	0.0
City of Yakutat	0.0	5.0	0.0
Mat-su Borough	0.0	13.0	0.0
Municipality of Anchorage	0.0	13.4	0.0
City & Borough of Juneau	0.0	22.0	0.0
North Slope Borough	0.0	0.5	0.0
City of Unalaska	0.0	2.0	0.0
	<hr/>	<hr/>	<hr/>
TOTAL	2,617.6	111.0	60.2

<sup>1</sup> Local Emergency Planning Committee

Table 7

FY91 CONTRACTUAL PAYMENTS EXCEEDING \$20,000

(In Thousands)

<u>Contractor</u>	<u>Amount</u>	<u>Purpose</u>
Bennett Environmental	237.0	Oil Spill Contingency Planning
Cave Electric	73.6	Sitka Heart Lake Contaminated Site
Harding Lawson	103.0	Marshal Groundwater
Hart Crowser Inc.	104.7	Skagway Municipal Water
Ketchum Air	30.3	Air Charter - Exxon Cleanup
Raven Technical	39.6	Sitka Air Monitoring
Shannon and Wilson	10.9	Contaminated Site Database
Shannon and Wilson	12.6	Shoup's Property Contaminated Site
Shannon and Wilson	87.4	Cook's Sterling Tesoro Contaminated Site
VRCA	34.3	Manley Hot Springs Contaminated Site
Arthur D. Little Inc.	89.9	Study of Non Crude Vessels
Eco Engineering	66.8	Prevention Requirements for C-Plans
Gifillan Engineering	36.1	Nikiski Vegetation Impact Assessment
Hunter Environmental Services	51.3	Air Quality Monitoring
Northwest Environmental Services	57.4	Clear Creek Salvage
Pacific Northwest Environmental	10.6	Cook's Sterling Tesoro Contaminated Site
Shannon and Wilson	153.9	Cook's Sterling Tesoro Contaminated Site
VRCA	65.6	Peninsula Greenhouses
Battelle Memorial	68.0	Laboratory Analysis - Exxon
E-Tech	116.2	Mapping Services - Exxon
Era Aviation	58.1	Air Charter - Exxon
Hoffman Commercial	84.2	Lease Space - Exxon
Ketchum Air Service	87.4	Air Charter - Exxon
Northwest Environmental Services	53.2	Cleanup and Disposal - Exxon
Maritime Helicopters	62.1	Air Charter - Exxon
Roy Self	29.4	Vessel Charter - Exxon
Willow Air Service	37.5	Air Charter - Exxon
Total	1,868.7	

Table 8

FY91 PURCHASES EXCEEDING \$10,000

(In Thousands)

<u>Vendor</u>	<u>Amount</u>	<u>Item(s) Purchased</u>
Anderson Instruments	47.4	Scientific Equipment
Data Systems West	10.6	Data Processing Equipment
Era Aviation	10.2	Equipment Repairs
Era Aviation	41.4	Air Charter
Kachemak Gear Shed	10.5	Boom, Rope, Supplies
Microage Computer	13.6	Data Processing Equipment
M/V Ultimate	19.5	Vessel Charter
TU of Alaska	11.4	Telephone Installation
Sears Roebuck	22.3	Data Processing Equipment
Connie Bennett	10.0	Space Lease Modifications
Total	<hr/> 195.9	

TABLE 9

PERSONAL SERVICES EXPENDITURES  
(In Dollars)

## SUMMARY OF PERSONAL SERVICES BY TYPE OF EXPENDITURE

State and Regional Contingency Planning	277,116
State Emergency Response Commission and Local Emergency Response Planning (HB566)	156,100
Spill Response, Containment, Safety, Cleanup and Cost Recovery	204,107
Spill Prevention and Response Preparedness (HB567)	634,682
Spill Response Office, Depots and Corps	363,795
Spill Response Drills	387,520
Contaminated Site Investigation, Safety, Cleanup and Cost Recovery	396,011
Kenai Cleanup Project	0
Exxon Valdex Project	2,870,178
Retroactive Payroll - Spill Reserve	76,629
Administrative Services Fund Accounting	196,819
Response Fund Shared Costs	135,380
TOTAL	5,698,337

## DETAIL OF PERSONAL SERVICES BY PCN

PCN	DESCRIPTION	TOTAL *
01 044x	On Scene Coordinator-Exxon	62,612
18 0001	Deputy On Scene Coordinator - Exxon	99,234
18 0002	On Scene Coordinator-Exxon	26,378
18 0010	Laborer	367
18 5087	Environmental Field Officer I	25,157
18 5090	Environmental Field Officer I	-36
18 7005	Environmental Conservation Manager	6,058
18 7007	Executive Secretary II	3,103
18 7010	Environmental Conservation Manager	3,326
18 7043	Clerk Typist III	1,042
18 7044	Clerk Typist III	3,530
18 7046	Information Officer III	6,632
18 7048	Environmental Engineer IV	9,972
18 7051	Environmental Conservation Manager	5,748
18 7052	Accountant IV	31
18 7057	Environmental Specialist II	-2,043
18 7063	Clerk Typist III	22,410
18 7064	Administrative Assistant III	2,565
18 7075	Environmental Specialist III	56,233
18 7080	Environmental Conservation Manager	6,626
18 7081	Environmental Specialist III	43,261
18 7085	Secretary II	327
18 7108	Environmental Specialist III	5,294
18 7113	Environmental Conservation Manager	10,392
18 7117	Accounting Technician I	-229
18 7118	Environmental Specialist IV	89
18 7119	Chemist II	-344
18 7121	Environmental Engineer III	12,615
18 7122	Environmental Specialist IV	-122
18 7130	Risk Management Officer II	17,355
18 7133	Environmental Engineer IV	1,574
18 7134	Clerk Typist II	4,148
18 7135	Environmental Specialist III	-212
18 7137	Environmental Conservation Manager	444

\*Negatives indicate a payroll adjustment has processed for prior overpayment.

Table 9 - Continued

18	7137	Environmental Conservation Manager	3,202
18	7138	Environmental Engineer III	1,395
18	7139	Environmental Specialist III	26,059
18	7140	Environmental Conservation Manager	68,706
18	7147	Ecologist I	189
18	7149	Analyst Programmer IV	30,779
18	7150	Paralegal Assistant I	1,891
18	7155	Planner IV	2,164
18	7156	Environmental Field Officer II	3,371
18	7157	Environmental Engineer III	43,068
18	7158	Environmental Specialist III	26,823
18	7159	Clerk Typist III	2,391
18	7160	Environmental Engineer IV	229
18	7161	Environmental Specialist IV	25,638
18	7164	Environmental Technician	898
18	7178	Clerk Typist III	2,649
18	7180	Clerk Typist III	948
18	7181	Clerk Typist III	115
18	7183	Documents Processor IV	1,119
18	7186	Clerk Typist II	1,024
18	7189	Environmental Engineer III	-59
18	7191	Environmental Field Officer II	38,264
18	7203	Field Office Assistant	1,220
18	7208	Administrative Officer II	5,584
18	7209	Environmental Conservation Manager	-771
18	7212	Environmental Health Officer II	-357
18	7232	Clerk Typist III	2,732
18	7246	Environmental Health Officer III	36
18	7248	Clerk Typist III	25
18	7249	Environmental Health Officer II	304
18	7250	Clerk Typist III	365
18	7252	Clerk Typist III	1,486
18	7258	Analyst Programmer III	216
18	7264	Environmental Specialist III	192
18	7265	Environmental Specialist II	25,729
18	7271	Environmental Engineer IV	12,732
18	7272	Administrative Assistant III	22,864
18	7274	Environmental Field Officer III	157
18	7279	Clerk Typist III	-56
18	7281	Environmental Field Officer II	24,313
18	7284	Village Sewerage Engineer III	3,634
18	7286	Clerk Typist III	3,776
18	7292	Environmental Specialist IV	284
18	7293	Ecologist II	18,920
18	7297	Chemist II	-46
18	7298	Environmental Field Officer III	76,667
18	7301	Environmental Health Officer IV	-963
18	7305	Information Officer I	9
18	7306	Analyst Programmer III	19,603
18	7310	Environmental Conservation Manager I	6,812
18	7313	Clerk Typist III	-93
18	7317	Environmental Engineer III	1,921
18	7318	Clerk Typist III	3,208
18	7319	Clerk Typist III	335
18	7321	Environmental Conservation Manager II	2,985
18	7324	Environmental Engineer III	164
18	7326	Environmental Specialist III	-628
18	7329	Environmental Engineer I	2,542
18	7330	Environmental Engineer III	1,348
18	7331	Personnel Specialist I	53
18	7335	Environmental Health Officer III	409
18	7337	Environmental Health Officer I	1,412

Table 9 - Continued

18	7338	Environmental Field Officer II	-209
18	7339	Analyst Programmer IV	667
18	7341	Environmental Microbiologist	234
18	7342	Administrative Assistant I	118
18	7343	Environmental Laboratory Technician	-152
18	7344	Environmental Health Officer III	48
18	7348	Environmental Conservation Manager III	18
18	7352	Environmental Engineer III	6,223
18	7354	Environmental Engineer III	1,238
18	7355	Clerk Typist III	293
18	7357	Environmental Specialist II	5,927
18	7358	Clerk Typist III	1,116
18	7364	Environmental Specialist III	329
18	7366	Environmental Specialist II	495
18	7367	Environmental Specialist III	8,353
18	7369	Project Assistant	-452
18	7374	Environmental Technician II	383
18	7375	Environmental Field Officer II	-170
18	7376	Hydrologist III	-1,257
18	7377	Environmental Specialist II	-81
18	7379	Environmental Engineer III	718
18	7381	Environmental Field Officer I	107
18	7383	Environmental Specialist IV	-38
18	7384	Environmental Conservation Manager III	458
18	7385	Administrative Assistant I	-26
18	7390	Administrative Assistant III	13,427
18	7391	Environmental Specialist IV	657
18	7393	Clerk Typist III	-46
18	7395	Environmental Conservation Manager III	63,287
18	7400	Environmental Field Officer I	29,310
18	7401	Environmental Field Officer III	16,405
18	7403	Environmental Technician II	1,550
18	7405	Environmental Specialist II	1,909
18	7407	Clerk Typist III	-124
18	7408	Risk Management Officer III	2,144
18	7415	Chemist III	-244
18	7417	Laboratory Assistant II	40
18	7424	Environmental Specialist II	42,873
18	7424	Environmental Specialist II	1,158
18	7427	Environmental Specialist II	11,823
18	7429	Environmental Health Officer II	1,898
18	7430	Environmental Engineer II	176
18	7432	Clerk Typist III	2,255
18	7433	Management Analyst II	12,516
18	7434	Clerk Typist III	2,019
18	7439	Clerk Typist III	32,141
18	7442	Environmental Specialist III	25,392
18	7443	Environmental Specialist III	35,116
18	7444	Hydrologist II	16,787
18	7445	Accounting Technician I	22,975
18	7446	Environmental Field Officer II	991
18	7448	Environmental Sanitarian	4
18	7452	Environmental Engineer III	22,336
18	7454	Administrative Assistant I	-152
18	7455	Administrative Assistant I	21,430
18	7456	Clerk Typist III	269
18	7457	Information Officer II	1,042
18	7458	Environmental Field Officer I	10,311
18	7459	Environmental Field Officer I	268
18	7461	Environmental Engineer II	7,096
18	7465	Environmental Specialist III	2,736
18	7467	Administrative Assistant III	15,883

Table 9 - Continued

18 7470	Environmental Specialist III	4,808
18 7475	Environmental Specialist II	11,745
18 7476	Environmental Specialist III	13,748
18 7477	Environmental Field Officer III	12,679
18 7478	Chief, Env Programs Analyst	2,303
18 7480	Environmental Specialist III	4,205
18 7481	Environmental Specialist III	-3,179
18 7485	Environmental Engineer II	278
18 7487	Supply Technician I	219
18 7489	Environmental Engineer II	1,669
18 7492	Environmental Specialist III	1,362
18 7493	Environmental Specialist III	625
18 7495	Supply Officer I	295
18 7497	Environmental Engineer II	387
18 7498	Environmental Specialist II	1,323
13 7511	Clerk Typist III	311
18 7514	Clerk Typist III	18,536
18 7515	Environmental Specialist IV	13,310
18 7517	Environmental Specialist III	57,288
18 7518	Environmental Specialist IV	11,481
18 7519	Administrative Assistant II	14,790
18 7525	Environmental Specialist II	32,526
18 7527	Environmental Conservation Manager	49,811
18 7528	Environmental Specialist II	336
18 7530	Environmental Specialist II	1,104
18 7531	Environmental Conservation Manager I	2,057
18 7532	Environmental Specialist III	37,659
18 7534	Ecologist III	319
18 7535	Clerk Typist III	22,743
18 7539	Paralegal Assistant I	-7
18 7540	Ecologist III	3,919
18 7541	Environmental Conservation Manager II	5,671
18 7543	Accounting Supervisor I	36
18 7545	Environmental Specialist IV	6,478
18 7550	Environmental Specialist III	128
18 7551	Administrative Assistant II	4,254
18 7552	Administrative Officer II	43,353
18 7554	Administrative Assistant III	45,720
18 7559	Environmental Specialist II	13,874
18 7560	Environmental Specialist III	4,541
18 7562	Environmental Specialist II	10,902
18 7564	Accounting Clerk II	6,579
18 7565	Environmental Specialist III	35,967
18 7568	Environmental Specialist III	35,319
18 7569	Environmental Specialist II	18,145
18 7571	Environmental Specialist II	26,197
18 7572	Environmental Specialist I	26,862
18 7576	Environmental Specialist II	1,549
18 7577	Environmental Specialist I	14,535
18 7578	Environmental Specialist II	10,437
18 7579	Environmental Specialist II	14,636
18 7581	Environmental Specialist III	37,718
18 7583	Environmental Specialist II	26,251
18 7585	Environmental Specialist II	8,780
18 7586	Environmental Specialist II	14,528
18 7587	Environmental Specialist II	29,100
18 7588	Environmental Specialist III	29,473
18 7593	Environmental Specialist III	26,221
18 7595	Environmental Specialist III	51,334
18 7596	Analyst Programmer III	35,826
18 7597	Environmental Specialist III	30,686
18 7598	Environmental Engineer II	19,450

Table 9 - Continued

18 7599	Environmental Engineer III	37,569
18 7601	Environmental Specialist III	9,160
18 7602	Environmental Specialist II	13,836
18 7606	Clerk Typist III	1,506
18 7607	Environmental Specialist III	26,648
18 7625	Clerk Typist III	2,801
18 7632	Administrative Assistant I	22,221
18 7636	Administrative Assistant II	14,805
18 7643	Accounting Technician III	30,699
18 7657	Administrative Assistant II	13,063
18 7658	Risk Management Officer II	23,710
18 7659	Publications Spec III	44,888
18 9999	Unidentified Payrolls	1,295
18 EM03	Administrative Assistant III	2,754
18 K081	Clerk Typist III	7,826
18 N099	Student Intern I	1,751
18 N104	Paralegal Assistant I	20,143
18 N105	Information Officer II	17,443
18 N108	Accounting Technician III	6,996
18 N109	Paralegal Assistant I	10,873
18 N112	Supply Technician I	2,772
18 N113	Analyst Programmer V	-580
18 N114	Clerk Typist III	3,717
18 N115	Clerk Typist III	21,638
18 N116	Clerk Typist III	28,758
18 N117	Clerk Typist III	2,721
18 N119	Clerk Typist III	19,961
18 N124	Clerk Typist III	2,116
18 N125	Administrative Assistant I	6,469
18 N127	College Intern III	11,784
18 N131	Accounting Clerk III	31,995
18 N132	Storekeeper VI	4,064
18 N133	Environmental Field Officer II	7,482
18 N134	Environmental Field Officer II	23,945
18 N135	Environmental Field Officer II	167
18 N142	Environmental Specialist II	60,048
18 N144	Environmental Field Officer II	68,404
18 N147	Environmental Field Officer II	435
18 N148	Environmental Field Officer II	52,982
18 N149	Environmental Specialist III	20,547
18 N153	Environmental Technician II	16,593
18 N154	Environmental Technician	6,484
18 N155	Environmental Technician	89
18 N157	Environmental Technician	43,482
18 N162	Environmental Technician II	22,907
18 N166	Environmental Technician II	14,153
18 N168	Environmental Technician	24,963
18 N170	Environmental Technician	33
18 N173	Environmental Technician II	35,016
18 N177	Environmental Technician II	38,459
18 N178	Environmental Technician	3,756
18 N179	Environmental Technician	8,032
18 N180	Environmental Technician III	43,879
18 N181	Environmental Field Officer I	4,933
18 N183	Environmental Technician	36,710
18 N186	Environmental Technician III	44,014
18 N192	Environmental Technician	7,075
18 N193	Environmental Technician	10,755
18 N194	Environmental Technician II	34,809
18 N196	Environmental Technician III	47,738
18 N198	Environmental Technician II	45,863
18 N199	Environmental Technician II	23,175

Table 9 - Continued

18	N204	Environmental Technician II	13,560
18	N205	Environmental Technician	10,937
18	N208	Environmental Technician	37,540
18	N216	Environmental Specialist I	17,979
18	N221	Environmental Field Officer III	65,547
18	N222	Environmental Specialist III	53,351
18	N230	College Intern III	10,637
18	N235	College Intern III	7,714
18	N242	Environmental Specialist I	21,970
18	N244	Environmental Technician II	46,643
18	N253	Personnel Officer I	894
18	N254	Publications Technician	11,408
18	N255	Information Officer I	7,816
18	N257	Environmental Technician	9
18	N260	Environmental Technician	12,509
18	N264	Environmental Technician	12,044
18	N266	Environmental Field Officer I	17,156
18	N268	Environmental Technician	6,902
18	N273	Environmental Technician	5,235
18	N274	Analyst Programmer I	53,492
18	N277	Environmental Technician II	37,975
18	N280	Environmental Field Officer II	10,174
18	N282	Environmental Field Officer II	6,345
18	N283	Environmental Technician II	38,167
18	N298	Environmental Field Officer II	16,001
18	N299	Environmental Specialist II	38,918
18	N300	Environmental Field Officer II	2
18	N301	Environmental Specialist II	41,387
18	N304	Clerk Typist III	21,702
18	N312	Environmental Specialist I	28,533
18	N312	Environmental Specialist I	8,316
18	N313	Environmental Specialist I	23,372
18	N314	Environmental Field Officer I	9,060
18	N315	Environmental Specialist I	34,938
18	N319	Administrative Officer II	13,315
18	N326	Environmental Technician	3,266
18	N327	Environmental Technician	6,942
18	N328	Environmental Technician	2,262
18	N329	Environmental Technician	137
18	N330	Environmental Technician	27
18	N332	Environmental Technician	6,821
18	N338	Environmental Technician	2,834
18	N341	Environmental Field Officer I	7,508
18	N344	Environmental Technician	6,020
18	N346	Environmental Technician	9,951
18	N347	Environmental Technician	3,608
18	N351	Environmental Technician	6,099
18	N355	Ecologist II	53,384
18	N357	Analyst Programmer III	57,205
18	N362	Environmental Laboratory Technician	10,391
18	N365	Environmental Laboratory Technician	3,215
18	N366	Project Coordinator	62,650
18	N370	Administrative Assistant I	4,085
18	N374	Environmental Technician	785
18	N379	Visual Information Specialist	49,555
18	N380	Project Assistant	11,141
18	N382	Paralegal Assistant I	34,898
18	N383	Clerk Typist III	1,109
18	N386	Clerk Typist III	31,196
18	N388	Clerk Typist III	18,881
18	N389	Clerk Typist III	28,355
18	N403	Analyst Programmer II	48,385

Table 9 - Continued

18	N413	Project Assistant	18,028
18	N417	Administrative Assistant I	145
18	N418	Chemist II	9,891
18	N421	Paralegal Assistant I	38,982
18	N423	Paralegal Assistant I	12,984
18	N426	Environmental Specialist III	12,101
18	N427	Environmental Specialist II	37,320
18	N430	Chemist III	17,967
18	N431	Environmental Field Officer I	773
18	N432	Environmental Specialist IV	32,487
18	N434	Accounting Clerk III	9,208
18	N435	Accounting Technician II	9,518
18	N437	Clerk IV	5,692
18	N438	Clerk IV	13,109
18	N439	Clerk IV	7,871
18	N442	Accounting Clerk III	20,006
18	N446	Accounting Technician II	42,010
18	N448	Accounting Technician I	8,036
18	N454	Management Analyst III	40,816
18	N455	Program Budget Analyst II	3,438
18	N456	Student Intern III	4,232
18	N457	Environmental Specialist II	15,603
18	N462	Accounting Technician I	26
18	N473	Paralegal Asst II	6,315
18	N476	Accounting Clerk III	10,303
18	N481	Ecologist I	26,951
18	N482	Personnel Assistant	1,019
18	N485	Data Processing Clerk I	26,149
18	N486	Data Processing Clerk I	21,412
18	N490	Clerk Typist III	75
18	N506	Internal Auditor I	13,224
18	N509	Clerk Typist III	2,137
18	N515	Personnel Specialist I	28,044
18	N535	Clerk Typist III	23,425
18	N538	Publications Spec II	19,067
18	N541	Student Intern I	4,233
18	N546	Student Intern II	398
18	N550	College Intern I	534
18	N551	College Intern I	1,294
18	N999	Clerk Typist III	15,917
18	S064	Student Intern I	-8
18	W097	Student Intern I	178
18	X002	Restoration Planning Proj.	24,687
18	X005	Policy Analyst	29,904
18	X006	Policy Analyst	24,516
18	X009	Policy Analyst	49,276
18	7456	Clerk Typist II	1,082
18	N360	Environmental Specialist III	41,745
25	0048	Personnel Assistant II	2,097
99	9999	Exxon Payroll Other Agency	208,755

5,698,337

## APPENDIX A

### SPILL RESPONSE SUMMARIES

This appendix includes detailed explanations of hazardous substance releases including oil spills on which \$1,000 or more was spent from the Response Fund during FY 91 for response control, containment, safety, cleanup, and cost recovery.

The DEC State On Scene Coordinator is responsible for ensuring appropriate actions are taken to control, contain, and cleanup hazardous substance releases, and recover Response Fund expenditures.

Title: Cruise Ship "Noordam" Chemical Spill

Site I.D.: 90-1-3-9-258-1

Location: Ketchikan

DEC Region: Southeast

Election District: H: 1 S: A

Ledger Code: 48000616

State on Scene Coordinator: Lester Leatherberry, SRO, 465-5372.

Situation:

On September 15, 1990 the cruise ship "Noordam" dumped several packages of chemicals into a garbage truck that had been brought alongside on a barge to remove the vessel's solid waste while in Ketchikan. The chemicals mixed with each other along with the water that was present in the truck, causing a chemical reaction which emitted chlorine and acid vapors. Several people were transported to the hospital by the fire department. The truck was moved to the local landfill and isolated.

FY 91 Actions:

DEC mobilized a response team, organized the responsible parties, and mounted an active response to the incident. The owners of the vessel assumed financial responsibility for all contractor cost. After careful identification of all the chemicals involved, a plan was implemented by the response action contractor and DEC staff to neutralize the remaining chemicals. This process took place over several days without further reported injuries. DEC staff were involved with controlling this incident from the first day through neutralization, overpacking and shipping for disposal.

DEC reached a settlement with the responsible party to fully recover DEC's expenses of \$16,455. A \$25,000 penalty was also applied to the responsible party.

FY 91 Expenditures: \$ 6,300

Title: Dritt River Terminal Crude Oil Release  
Site I.D.: 90-2-3-1-069-1  
Location: Cook Inlet  
DEC Region: Southcentral  
Election District: H: 5 S: D  
Ledger Code: 48000589

State on Scene Coordinator: Lester Leatherberry, Kenai District Office, 262-5210.

Situation:

On March 10, 1990, 2,000 barrels of crude oil was released from a large bulk storage tank (tank # 3) when a valve was inadvertently opened during cleaning operations. The leaking oil was retained inside the containment berm that was designed to contain such spills at the facility.

FY 91 Actions:

DEC conducted overflights of the area and worked in coordination with the responsible party on a clean-up and recovery plan. The oil within the containment area was recovered and no long term environmental damage occurred. DEC staff closely monitored the cleanup. The facility was previously subjected to flooding due to eruptions from Mt. Redoubt.

Since the oil spill was confined by the facility's containment berm with no release to the environment, no cost recovery actions were taken.

FY 91 Expenditures: \$ 1,400

Title: Iliuliuk Harbor Mystery Oil Spill

Site I.D.: 91-2-6-1-142-1

Location: East Sound Dutch Harbor

DEC Region: Southcentral

Election District: H: 26 S: N

Ledger Code: 48000632

State on Scene Coordinator: Eileen Olsen, Western District Office, 563-6775.

Situation:

A spill of waste oil was reported to DEC's Unalaska Field office on May 22, 1991. A Western District Office staff person on temporary rotational duty took charge of the investigation and clean-up. Since the responsible party was unknown, DEC took the lead in organizing the response and cleanup actions. After the preliminary investigation, the initial report of approximately 200 gallons of product in the water was rapidly upgraded to more than of 2,000 gallons.

FY 91 Action:

The DEC SOSOC pulled together three local companies and some on hand Coast Guard materials to provide manpower, supplies, and equipment to clean-up the oil. After two days of intensive work, over 3,000 gallons of oily mousse and 20 drums of soiled sorbent material had been collected and the clean-up deemed substantially complete. Quick decisive action by DEC staff in organizing and directing locally available resources produced excellent, cost effective results in a timely manner.

Oil samples were taken from all of the available vessels and the spilled oil in an attempt to identify the spiller for cost recovery and possible penalty actions. DEC is actively investigating cost recovery options with the Coast Guard.

FY 91 Expenditures: \$ 6,500

Title: Alaska Rail Road Oil Spill  
Site I.D.: 90-1-3-9-258-1  
Location: Mile 433, Dunbar Siding  
DEC Region: Northern  
Election District: H: 17 S: J  
Ledger Code: 48000595

State on Scene Coordinator: Paul Bateman, Northern Regional Office, 451-2182.

Situation:

Nineteen cars of a Alaska Railroad train derailed on May 28, 1990, spilling a mixture of refined oil products estimated to be in excess of 165,000 gallons into a remote wetlands and beaver ponds. The spill area was immediately adjacent to Goldstream Cree., which drains into Minto Flats, a State refuge and very sensitive waterfowl habitat.

Fy 91 Action:

While initial cleanup was completed in FY 90, DEC continued to monitor operations of the Alaska Rail Road who assumed financial responsibility for the spill during FY 91. The responsible party drafted a site assessment, sampling, recovery, and remediation plan. DEC evaluated and approved the plan and has visited the spill site on several occasions to oversee the ongoing cleanup. Approximately 81,000 gallons of product were recovered.

DEC is currently working with the Department of Law on cost recovery for this site.

FY 91 Expenditures: \$ 16,200

## APPENDIX B

### CONTAMINATED SITE SUMMARIES

This appendix includes detailed explanations of sites on which \$1,000 or more was spent from the Response Fund during FY 91 for Contaminated Site Investigation, Safety, Cleanup and Cost Recovery.

The DEC Project Manager for Contaminated Sites Section project work has been delegated authority by the Commissioner's Office to expend Response Funds on a specific site investigation or remediation project. A Project Manager is assigned to each project as the site is discovered and manages all activities pertaining to investigation and cleanup of the site including, cost tracking, approval of all project funds, and cost recovery.

Title: Ketchikan Pulp Corporation Dioxin  
Location: Ketchikan  
Site I.D.: 901122741  
DEC Region: Southeast  
Election District: H:1S:A  
Project Manager: Amy Kruse, Southeast Regional Office, Juneau, 465-5350

Situation:

The Environmental Protection Agency (EPA) conducted a study of dioxin levels in fish in the vicinity of pulp mills throughout the United States. This study indicated elevated dioxin and furan concentrations in fish collected in the vicinity of Ward Cove. The elevated dioxin in the fish was inferred to be a result of pulp mill discharges to the bay.

FY 91 Actions:

On October 11, 1990, DEC carried out a preliminary sampling effort to determine the possibility of dioxin contamination in fish caught in the Ward Cove area. A total of 20 salmon were collected. Four composite samples consisting of three to seven whole fish were analyzed as well as a composite sample of fish livers. All samples showed the presence of 2,3,7,8-tetrachlorodibenzofuran. Concentrations ranged from 0.45 parts per trillion (ppt) to 1.8 ppt.

A cost recovery meeting with the responsible party is scheduled for early 1992.

FY 91 Expenditures: \$6,800

Title: Skagway Upland  
Location: Skagway  
Site I.D.: 891192991  
DEC Region: Southeast  
Election District: H:2S:B  
Ledger Code: 48000387  
Project Manager: Albert Kegler, Juneau District Office, Juneau, 465-5350

Situation:

Heavy metal contamination from transport and handling of lead ore from Canada has been found in the vicinity of the Skagway Lead Ore Terminal. Ore concentrate was lost from trucks, stockpiles, and ship loading facilities at the terminal located in downtown Skagway. Two responsible parties were involved in the cleanup. White Pass and Yukon Railroad were responsible for cleaning the railroad right of way and terminal. Bowhead Equipment Company cleaned up the truck routes. Air and soil monitoring programs are in place.

FY 91 Actions:

A field office was opened in Skagway and staffed with a temporary employee to oversee this project. Soil samples were collected and analyzed for heavy metals in an effort to identify the extent of lead contamination.

Cost recovery meetings are scheduled in early 1992 with the four identified responsible parties.

FY 91 Expenditures: \$23,000

Title: Skagway Marine  
Location: Skagway  
Site I.D.: 881192993  
DEC Region: Southeast  
Electin District: H:2S:B  
Ledger Code: 48000591  
Project Manager: Albert Kegler, Juneau District Office, Juneau, 465-5350

Situation:

Heavy metal contamination from transport and handling of lead ore from Canada has been identified at the Skagway Lead Ore Marine Terminal and in Taiya Inlet. Ore concentrate was lost from stockpiles and ship loading facilities at the terminal located in downtown Skagway. Two responsible parties are involved in the cleanup.

FY 91 Actions:

ADEC opened a temporary field office in Skagway to oversee Skagway field investigations. A temporary employee was hired to assimilate existing reports and to assemble a final report with recommendations for further investigations. Water and marine sediment samples were collected and analyzed for heavy metals. Several offshore areas of lead contamination were identified by the sampling.

Cost recovery meetings with the four identified responsible parties is scheduled for early 1992.

FY 91 Expenditures: \$13,800

Title: Skagway Municipal  
Location: Skagway  
Site I.D.: 893113461  
DEC Region: Southeast  
Election District: H:2S:B  
Ledger Code: 48000605  
Project Manager: Randy Rice, Southeast Regional Office, Juneau, 465-5040

Situation:

Groundwater is contaminated with low levels of chlorinated solvents in the Skagway River valley. Detectable levels have been found in the City of Skagway municipal system water, as well as private wells in the vicinity.

FY 91 Actions:

DEC contracted a consultant and performed investigative work. Eight monitoring wells were installed and thirteen soil borings and samples taken. Better characterization of the plume of contamination and groundwater flow was obtained. The White Pass and Yukon Railroad yard was identified as one source of chlorinated solvent contamination. Limited data suggests the potential for additional contamination sources to be present. Additional investigation is needed to further delineate all potential sources.

No responsible parties have been identified. Cost recovery will await further investigation to identify the responsible parties.

FY 91 Expenditures: \$116,600

Title: Sitka Air Monitoring, Alaska Pulp Corporation (APC)  
Site ID: 891262511  
Location: Sitka  
DEC Region: Southeast  
Election District: H:3S:B  
Ledger Code: 48000547  
Project Manager: Gerry Guay, Air Quality Management Section, Juneau  
465-5107

Situation:

Air quality modeling of sulfur dioxide and particulate emissions from the pulp mill in Sitka identified potential violations of ambient air quality standards. To better evaluate actual impacts from the facility, DEC installed a monitoring site over-looking the mill. The requirement to conduct ambient monitoring or reimburse the state for its costs was included in Alaska Pulp Corporation's latest permit.

FY 91 Actions:

The Department operated and maintained a monitoring site (Heart Lake) overlooking the Alaska Pulp Corporation (APC) between July 1, 1990 and June 30, 1991. Site operations were conducted by Raven Technical under contract to the State.

The State was reimbursed for all expenditures as agreed upon in APC's current contract. The State is exploring the possibility of having APC contracting directly for the monitoring site operation.

FY 91 Expenditures: \$140,900

Title: Cook's Corner Tesoro  
Location: Sterling  
Site I.D.: 892311371  
DEC Region: Southcentral  
Election District: H:5S:D  
Ledger Code: 48000623  
Project Manager: Paul Horwath, Kenai District Office, Soldotna 262-5210

Situation

The Department of Transportation and Public Facilities identified petroleum contaminated soil and groundwater at a service station while investigating right-of-way properties as part of the Sterling Highway road improvement project. Once this fact was reported to DEC, a sampling program was conducted in March 1991 to investigate the possibility of off-site migration of petroleum contamination. This sampling confirmed groundwater contamination had migrated onto neighboring properties dependent upon groundwater for domestic water supplies.

FY 91 Actions:

DEC staff from the Kenai District Office drafted a scope of work for cleanup and containment measures at this site, after establishing that the owner/operator of the site was unwilling/unable to provide a cleanup and containment response. DEC retained Shannon and Wilson, Inc., to perform assessment and cleanup activities at the site. A total of five additional monitoring wells were installed and approximately 2,500 cubic yards of petroleum contaminated soils were excavated and placed into an on-site storage/treatment cell.

The owner of the service station signed a compliance order by consent (COBC) and a confession of judgement with the DEC, and liens have been filed against the property. The COBC provides for a scheduled payment process that will allow the owner to repay the State's costs.

FY 91 Expenditures: \$153,900

Title: Peters Creek Tesoro Phase II  
Location: Chugiak  
Site I.D.: 862110621  
DEC Region: Southcentral  
Election District: H:15S:I  
Ledger Code: 48000591  
Project Manager: Kevin Kleweno, Anchorage District Office,  
Anchorage, 563-6775

Situation:

Gasoline spills of unknown quantities and duration contaminated the Peters Creek groundwater. Beginning in April 1986, about thirty-six residential wells were abandoned because of benzene levels and gasoline taste in the water.

In 1986 a new community water system was installed with DEC grant assistance. DEC contractors installed seventeen test wells to determine the source and extent of the contamination. Monitor wells and a vapor extraction system were installed and approximately 24,500 pounds of contamination were removed between May 1989 and January 1990.

FY 91 Actions:

Work conducted during FY 91 included sampling of several drinking water wells in the area, sampling and analyzing ground water from monitoring wells associated with the project, and operating the vapor extraction system. Results from the monitor well sampling shows a reduction in the concentration of benzene and other gasoline constituents in the contamination plume. The vapor extraction system was operated from June to November, 1990. Operation of the vapor extraction system in FY 91 resulted in the removal of approximately 2,400 pounds of contaminant.

As part of a \$600,000 settlement reached in 1989, the responsible parties are released from any further liability at this site.

FY 91 Expenditures: \$32,100

Title: Kodiak Small Boat Harbor  
Location: Kodiak  
Site I.D.: 892501931  
DEC Region: Southcentral  
Election District: H:27S:N  
Ledger Code: 48000594  
Project Manager: Max Schwenne, Southcentral Regional Office, Anchorage  
563-6529, Bill Rieth, Kodiak Field Office, 486-6760

Situation:

During June 1989, fuel was reported seeping into the Kodiak small boat harbor. The fuel flowed continuously and was most evident at low tide. DEC hired a contractor in January 1990 to find the source of the seep. The results of the field investigation indicated that the fuel plume was coming from a supermarket. The owner of the supermarket had the fuel tank removed and the entire system pressure tested. The return backup generator line failed the pressure test and residual contamination was found in the area. The potentially responsible party (PRP) maintained that the tank and associated lines were not the source of the harbor seep contamination based upon their interpretation of the tank and line tightness tests. Consequently, the PRP refused to take over cleanup of the spill.

FY 91 Actions:

The Harbor Master collected fuel with booms and absorbent materials as it flowed into the harbor. The PRP has been unwilling to perform cleanup; consequently, DEC took over and maintained the effort to contain the fuel and remove it from the harbor. The Department reimbursed the City of Kodiak a total of \$60,156 for initial assessment and cleanup costs the city incurred. The PRP has agreed to perform additional site investigation to identify the source of the plume.

PRP funds have been placed in escrow as a result of Department cost recovery actions. The escrow funds are not sufficient to cover the entire cost of the Department's response and further cost recovery is being pursued.

FY 91 Expenditures: \$93,500

Title: Marshall Groundwater

Location: Marshall

Site I.D.: 902221351

DEC Region: Southcentral

Election District: H:26S:M

Ledger Code: 48000629

Project Manager: Mike Lewis, Western District Office, Anchorage 563-6775

Situation:

In December 1990, DEC received complaints of objectionable taste and odor in the drinking water supply at the City of Marshall. The U.S. Public Health Service sampled the city well and identified petroleum hydrocarbon contamination. The city discontinued use of the well and developed an emergency drinking water source for Marshall residents.

FY 91 Actions:

A site investigation commenced on May 30, 1991. Twenty six soil borings and six monitoring wells were completed. Three of the monitoring wells could not be developed and were abandoned. An on-site gas chromatograph was employed to analyze 144 soil samples for petroleum hydrocarbons. The source of the groundwater contamination was identified as the fuel transfer pipeline connecting the Maserculiq Village corporation fuel storage tanks and city water treatment plant fuel storage tanks. The petroleum contamination consists of both diesel and gasoline range hydrocarbons. The Public Health Service completed an alternative drinking water well for the City of Marshall in September 1991.

Cost recovery meetings are scheduled in early 1992 with the two identified responsible parties.

FY 91 Expenditures: \$107,800

Title: Shoup's Property

Location: Fairbanks

Site I.D.: 893192505

DEC Region: Northern

Election District: H:21S:K

Ledger Code: 48000613

Project Manager: Leslie Simmons, Interior District Office, Fairbanks 451-2360

Situation:

Miscellaneous leaking chemical containers were found onsite in 1987, including photochemicals, acids, liquid mercury, batteries and sodium cyanide. Other hazardous substances reported on site were containers of uranyl nitrate, mace, electron tubes and miscellaneous containers of paint. A chain link fence was erected around the property in 1987 to restrict entry. The responsible party assumed responsibility for cleanup.

FY 91 Actions:

A grid coordinate system was established on site and a systematic inventory of the site was completed in October, 1990. A radiation detector was used throughout the site survey. No radioactive materials were detected. Approximately 200 pounds of unidentified chemicals were located and contained on a wooden pallet. It is estimated that two to three drums of miscellaneous waste need to be removed from the site, and the chemicals should be packaged for disposal.

The responsible party recently died and cost recovery efforts are not being pursued.

FY 91 Expenditures: \$12,600

Title: Minto Water System

Location: Minto

Site I.D.: 893112491

DEC Region: Northern

Election District: H:24S:M

Ledger Code: 48000559

Project Manager: Dan Basketfield, Interior District Office. 451-2360

Situation:

In April 1989, a petroleum product was observed in water removed from Minto Well #3 during pump renovations. Water samples were analyzed and found to contain volatile organic compounds. A layer of petroleum hydrocarbons was also observed in the community's water storage tank. The city discontinued the use of Well 3, and began to draw water exclusively from Well 1. In September 1989, DEC collected a sample from Well #3 that consisted of 21 inches of petroleum product. Subsequent sampling of three drinking water wells revealed benzene, toluene, ethylbenzene, and xylenes in each well. The source of petroleum hydrocarbon contamination has been identified as a tank farm jointly owned by the City of Minto and the Alaska Village Electrical Cooperative (AVEC). A product recovery pump was installed in a monitoring well to recover petroleum hydrocarbons.

FY 91 Actions:

DEC is continuing to work with AVEC in operating a product recovery well. Monitoring and sampling of the drinking water wells has continued through FY 91.

Meetings are scheduled in early 1992 with the two identified responsible parties to discuss terms of a settlement.

FY 91 Expenditures: \$11,800

Title: Manley Hot Springs Gravel Pit  
Location: Manley Hot Springs  
Site I.D.: 863191151  
DEC Region: Northern  
Election District: H:24S:M  
Ledger Code: 48000599  
Project Manager: Ed Armstrong, Northern Regional Office, Fairbanks, 451-2360

Situation:

Abandoned drums of herbicide dating from 1950s leaked and contaminated soil adjacent to a gravel pit near the town of Manley Hot Springs. Contamination associated with the three abandoned drums included an early form of 2,4,5-T that contained relatively high levels of dioxin (2,3,7,8-TCDD). The site was originally owned by Department of Transportation and Public Facilities (DOTPF) but is now owned by the local native corporation. The presence of herbicide was verified in the fall of 1989. The contamination is believed to have occurred during DOTPF ownership.

FY 91 Actions:

The three abandoned drums were overpacked and, along with 13 drums of excavated contaminated soil, were secured onsite in a conex container. There is currently not a destruction technology available for dioxin wastes.

No responsible party has been identified for the abandoned drums. Cost recovery is not anticipated.

FY 91 Expenditures: \$37,100

Title: Child's Pad  
Location: Deadhorse  
Site I.D.: 913601131  
DEC Region: Northern  
Election District: H:22S:L  
Ledger Code: 48000633  
Project Manager: Mehrdad Nadem, Pipeline Corridor Regional Office,  
Fairbanks, 451-2360

Situation:

A heavy oil sheen was observed in ponded water on the gravel pad during spring 1990 breakup. It is believed the oil is from past spills on the pad which resurface during spring breakup.

FY 91 Actions:

DEC mobilized a remediation term contractor, VRCA, Inc., to contain the oiled water. A vacuum truck was used to collect petroleum contaminated water. Samples were collected for lab analyses. Thirty three thousands gallons of contaminated water were disposed of at the ARCO Alaska, Inc. deep injection well. Although containment and removal of the oiled water was completed, the site is complex and has other areas which are being considered for State lead remediation.

The prior site lessee is in bankruptcy, and the State manages the land by default. Cost recovery is not anticipated.

FY 91 Expenditures: \$8,200

Title: Citigold Pad B Cyanide  
Location: Fairbanks  
Site I.D.: 893191531  
DEC Region: Northern  
Election District: H:19S:K  
Ledger Code: 48000601  
Project Manager: Ed Armstrong, Northern Regional Office,  
Fairbanks, 451-2360

#### Situation

Cyanide contaminated soil and groundwater from leaking heap-leach pad liners was detected in May 1989. It was also reported that hydrochloric acid contamination may be present on site. Petroleum hydrocarbon releases in 1988 and 1989 also contaminated the soil in the vicinity of the leach pad. The Potential Responsible Party (PRP) prepared an Environmental Monitoring Plan in 1989. The plan included the installation of five monitoring wells to determine cyanide contamination. The leach pad was neutralized in June of 1990.

#### FY 91 Actions:

Soil and the leach pad liner were sampled for cyanide. The remaining ore and liner were removed from Pad B on July 9, 1990. Groundwater sampling conducted in August 1990 detected cyanide in two wells. The wells were resampled on August 9 and September 4, 1990. Analyses showed no cyanide contamination.

A settlement has been reached with the responsible party for reimbursement of DEC costs.

FY 91 Expenditures: \$16,000

**APPENDIX C**

**KENAI CONTAMINATED SITE SUMMARIES**

Title: Nikiski Air Monitoring  
Location: Nikiski  
Site I.D.: 882311839  
DEC Region: Southcentral  
Election District: H:5S:D  
Ledger Code: 48020414  
Project Manager: Gerry Guay, Air Quality Management Section,  
Juneau, 465-5201

Situation:

Several years of non-specific citizen complaints from residents surrounding the Nikiski Industrial Complex resulted in the installation of an air quality monitoring site on Bernice Lake in 1988. Upon identification of an acceptable ammonia analyzer, the site began background monitoring for ammonia in 1989. A second "maximum impact" ammonia monitoring site (Phillips Site) was established in July, 1990 to evaluate the intermittent release of ammonia.

FY 91 Actions:

The Department conducted ammonia and particulate monitoring at the Phillips monitoring site from late July 1990 through June 30, 1991. Environmental Science & Engineering (ESE) was selected as the contractor to operate the site. Elevated ammonia concentrations were detected intermittently, but never of sufficient duration to approach the proposed standard of 3.1 ppm. The Ammonia Standard was signed into law in June, 1991. The ESE monitoring contract was discontinued on June 30, 1991.

FY 91 Expenditures: \$ 45,100

Title: Peninsula Greenhouse  
Site ID: 87230932001  
Location: Soldotna  
DEC Region: Southcentral  
Election District: H:5S:D  
Ledger Code: 48020418  
Project Manager: Deric Marcorelle, Kenai District Office, Soldotna  
262-5210

Situation:

DEC investigated the Peninsula Greenhouse site on April 22, 1982, after reports of misuse of parathion pesticides. Pesticides were improperly used inside the structure resulting in personal injury. In 1984, the State of Alaska assumed control of the property when it was foreclosed by DNR Land and Water Division. A 1986 DEC inspection of the structures on site identified the property to be an "attractive nuisance" and a threat to persons trespassing on site. There was evidence of vandalism at the site. On April 16, 1987, DEC inspected the property and discovered abandoned unrestricted pesticides, oil, and unidentified chemicals in disintegrating containers. The greenhouse structure collapsed in the winter of 1987-1988 due to a heavy snow load. DNR could not secure funding for site remediation, so DEC chose to utilize Kenai Special Appropriation Funds to proceed.

FY 91 Actions:

DEC contracted VRCA Environmental Services, Inc. to perform a limited site cleanup on June 15, 1990. All site work was performed in FY 91, and was conducted in three phases. Phase I consisted of asbestos removal from pipes in the collapsed structure, and sampling of florescent light ballasts for the presence of PCBs. This work was completed on July 6, 1991. Phase II work was carried out on July 24, 1991, and consisted of collecting 695 PCB laden light ballasts, and sampling of identified burn piles for PCBs, pesticides, and dioxins. Preliminary analytical results from the sampling were received on September 24, 1991, and confirmed the presence of low levels of dioxin in several of the burn piles. Phase III work was initiated on October 9, 1991, and consisted of constructing an eight-foot chain link fence around the perimeter of the site to prevent human contact with the known contamination.

Reports summarizing the DEC cleanup actions were sent to DNF, along with recommendations for future site assessments. The immediate threat to human health has been reduced at this site. Additional site assessment is required at this site to determine the extent of additional burn piles and uncollected light ballasts and to test for potential pesticide contamination.

FY 91 Expenditures: \$65,500

Title: Rabbit Run Drum Site  
Site ID: 88230130405  
Location: Soldotna  
DEC Region: Southcentral  
Election District: H:5S:D  
Ledger Code: 48020261  
Project Manager: Deric Marcorelle, Kenai District Office, Soldotna, 262-5210

Situation:

Thirteen drums are located on property near the corner of Rabbit Run Road and Lourdes Rd, approximately 14 miles southeast from Soldotna. The site owner alleges that the drums contain waste oil and turbine oil, an oil spill from this site was reported to DEC on April 16, 1991. ADEC staff found several leaking drums and spilled oil traveling up to 120 feet from the drum area.

FY 91 Action:

DEC deployed sorbent boom to contain the oil spill. Northwest EnviroService, Inc. was contracted to secure the site and stop the release of substances from the barrels. The leaking drums were placed in overpack containers and all of the drums were sampled to identify the contents. The sample results indicated five drums contains oil and water mixtures, 6 drums with waste oil and two drums contains halogenated oil. The cleanup action also produced one drum of petroleum contaminated sorbent pads and tyvek suits. All of the drums are secured on site. The property owner has been contacted and cost recovery is being pursued. DEC will dispose of the barrels in the spring of 1992 if the property owner refuses to initiate disposal actions.

FY 91 Expenditures: \$3,800

Title: Nikiski Vegetation Impact Assessment  
Site ID: 882311839  
Location: Nikiski  
DEC Region: Southcentral  
Election District: H:5S:D  
Ledger Code: 48020426  
Project Manager: Tom Chapple, Air Quality Management, Juneau

Situation:

The primary objective of this study was to investigate and evaluate the extent of vegetation damage which has occurred in the vicinity of the Nikiski Industrial complex. Visual observations revealed dead and dying coniferous trees within close proximity to the industrial complex. It was felt that damage and growth retardation may have extended to numerous other indigenous vegetation forms.

FY 91 Actions:

DEC Air Quality Management staff drafted a RFP and scope of work which allowed for a first level study of vegetation within the project area. The contractor retained to conduct the sampling and analysis was Gilfillian Engineering, Inc. and its subcontractors, E & S Environmental Chemistry and Integrated Forest Ecology. The collection and analysis of vegetation, soil, and precipitation samples took place during the autumn of 1990. The findings showed a scientific link between local emissions of nitrogen oxides and ammonia to an increase in mortality of spruce and birch trees. In addition, notable changes were also found in lower vegetative species, such as lichen and other understory plants.

FY 91 Expenditures: \$36,100

Title: Clear Creek Salvage Yard  
Site ID: 862309  
Location: Seward  
DEC Region: Southcentral  
Election District: H:6S:E  
Ledger Code: 48020417  
Project Manager: Deric Marcorelle, Kenai District Office, Soldotna  
262-5210

Situation:

DEC received complaints in March, 1986, concerning the potential for hazardous wastes at a junkyard located on Resurrection River Road approximately two miles northeast of the Seward Highway. The owner of the property died in 1987 and the property has remained vacant. DEC staff visited the property in 1988. Visible contamination included containers of DDT, orthotolodene, batteries, and thirty five drums. The extent of contamination could not be fully examined due to the extent of junked cars and other scrap on site.

Northwest EnviroServices, Inc. was contracted to conduct a preliminary site cleanup in August 1989. The contractor prepared a site map and identified over 200 small containers and 60 empty drums. Lead-acid batteries were collected for recycling in Anchorage. Identified hazardous substances were staged for later disposal. In May, 1990 soil samples were collected to analyze for petroleum hydrocarbons and PCBs. Drums of solid waste were consolidated for eventual disposal.

FY 91 Actions:

On July 30, 1990, solid waste from the site was disposed of at a landfill. Petroleum contaminated soils were excavated and stockpiled. Hazardous waste containers in drums and overpacks were transported to Seattle Washington on December 4, 1990, for disposal. A final report outlining the contractors actions and listing an inventory of identified waste was received by DEC on May 30, 1991.

FY 91 Expenditures: \$57,400