



Regional Citizens' Advisory Council / "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers."

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April 25, 1997

Commandant (G-M)  
RADM Robert C. North, Chief  
Marine Safety and Environmental Protection Directorate  
Office of Response, U.S. Coast Guard Headquarters  
2100 Second Street SW  
Washington, DC 20593-0001

Dear Sir:

Please find enclosed the Prince William Sound Regional Citizens' Advisory Council's application for recertification as the alternative voluntary advisory group for Prince William Sound, per Sec. 5002 (o) of the Oil Pollution Act of 1990. The application consists of the following documents:

- Narrative covering sections (a) through (e) of the guidelines;
- Addendum on RCAC's efforts to promote partnership with industry and government;
- Financial & planning information;
  - Proposed Budget and Work Plan for 1997-98
  - Chart of projects for 1997-98
  - 10-year visions
- RCAC's 1996 Year in Review;
- Protocol between RCAC and Alyeska Pipeline Service Co., and
- Independent auditors' report June 30, 1996 (FY 96).

In addition, enclosed find:

- A copy of our report, "RCAC Retrospective: The successes and lessons of a citizens' advisory group";
- Newspaper ad and press release on availability of application for public review. These will be distributed to all newspapers in the region when the notice appears in the Federal Register, and
- Updated list of groups you may wish to contact regarding the application.

If you need any additional information please don't hesitate to call me or Marilyn Leland in our office.

Sincerely,

John Devens, Ph.D  
Executive Director

cc: Meg Sudduth, Community Civic Liaison  
Alyeska Pipeline Service Co.

## 1997 Recertification Application

### **(a) Membership Information**

#### **(1) Selection and appointment process**

The membership of the Prince William Sound Regional Citizens' Advisory Council is stipulated in its bylaws. Members consist of communities impacted by the Exxon Valdez oil spill and groups representing specific people or interests with a stake in the region. Member organizations appoint individuals to represent them on the RCAC Board of Directors.

Directors serve at the pleasure of the organization they represent. The bylaws require each representative be a resident of the State of Alaska with the intent of remaining a permanent resident.

Directors serve staggered two-year terms. There is no limit to the number of consecutive terms a director may serve. When a director's term expires, the member organization submits in writing the name of the person it wishes to be seated on the board. Directors are formally seated by a vote of the directors at the annual meeting in March. When a director leaves mid-term, the member organization may appoint a new replacement to fill the unexpired term. The replacement must be formally approved by the Board of Directors.

If a member organization resigns from RCAC (as occurred in 1993 with the resignation of the National Wildlife Federation), applications from other organizations representing the same constituency are solicited through advertisements in all newspapers in the spill impacted region.

#### **(2) Board of Directors**

Charles Christiansen (Larson Bay), Kodiak Village Mayors Association  
Wayne Coleman (Kodiak), Kodiak Island Borough  
Bill Lindow (Anchorage), Prince William Sound Aquaculture Corporation  
Louis "Tex" Edwards (Homer), City of Homer  
Larry Evanoff (Chenega), Community of Chenega  
Jo Ann McDowell, Ph.D. (Valdez), City of Valdez (*replaced Mike Gallagher in March 97*)  
Keith Gordaoff (Anchorage), Chugach Alaska Corp.  
Blake Johnson (Nikiski), Kenai Peninsula Borough  
Margy Johnson (Cordova), City of Cordova  
Vacant, Community of Tatitlek  
Dennis Lodge (Seward), City of Seward  
Michelle Hahn O'Leary (Cordova), Cordova District Fishermen United  
Dale Heath (Kodiak), City of Kodiak (*replaced Kristin Stahl-Johnson in March 97*)  
Stan Stephens (Valdez), Alaska Wilderness Recreation and Tourism Association  
Marilynn Heddell (Whittier), City of Whittier  
Tim Volstad (Seldovia), City of Seldovia  
William M. Walker (Anchorage), City of Valdez  
Charles K. Weaverling (Cordova), Oil Spill Region Environmental Coalition  
Tom Jensen (Anchorage), Alaska State Chamber of Commerce  
(*replaced George Wuerch Jan. 97*)

### (3) Technical committee members and residence

(\* denotes RCAC director) (as of 4/1/97)

#### Port Operations and Vessel Traffic Systems Committee

Grady Harker (Valdez)	Vincent B. Mitchell (Valdez)
Vince Kelly (Valdez)	Tom McAlister (Valdez)
Linda Lee (Valdez)	Neil Schultz (Cordova)
Dennis Lodge* (Seward)	James Beckham (Cordova)
Bill Conley (Valdez)	Tex Edwards (Anchorage)*

#### Oil Spill Prevention and Response Committee

Paul Andrews (Homer)	Jerry Brookman (Kenai)
Wayne Coleman (Kodiak)*	Jon Dahlman (Seward)
Gail Evanoff (Chenega Bay)	Lee Majors (Valdez)
Gordon Scott (Girdwood)	Lou Weaver (Valdez)
Joe Jabas (Valdez)	Natasha Edwards (Girdwood)

#### Scientific Advisory Committee

Peter Armato (Seward)	Bill D'Atri (Anchorage)
Gig Currier (King Salmon)	Ivan Frohne (Wasilla)
David Hite (Anchorage)	Dr. A.J. Paul (Seward)
James Steward (Anchorage)	Richard Tremaine (Anchorage)
Charles K. Weaverling (Cordova)*	Gary Lawley (Anchorage)
John Williams (Cordova)	

#### Terminal Operations and Environmental Monitoring Committee

Bob Benda (Valdez)	David Connor (Valdez)
E.A. Jim Levine (Anchorage)	Paul McCullom (Homer)
Sara Pearson (Soldotna)	George Skladal (Anchorage)
Stan Stephens (Valdez)*	David DeGrandpre (Anchorage)
David Kang (Kodiak)	Joe Price (Valdez)
Sean Thurston (Valdez)	

### (b) Meetings publicized and accessible to communities

Quarterly board meetings of the RCAC are publicized through press releases and advertisements in local newspapers in the region. All meetings are open to the public, with the exception of executive sessions. Committee meetings and board teleconferences are not usually publicized but they are open to the public. The public is always provided opportunity to comment.

### (c) Interest groups represented

Commercial fishing interests are represented on the RCAC by Cordova District Fishermen United. Aquaculture interests are represented by the Prince William Sound Aquaculture Corporation.

Alaska Natives are represented by Chugach Alaska Corporation. In addition, the predominantly-Native communities of Chenega Bay and Tatitlek each has a seat on RCAC and six villages on Kodiak Island are represented by the Kodiak Village Mayors' Association. Native environmental interests are also represented through Nunagpet/CEPC, one of six environmental groups that make up the Oil Spill Region Environmental Coalition.



Tourism in the region is represented by the Alaska Chamber of Commerce, and recreation interests are represented by Alaska Wilderness Recreation and Tourism Association.

The Oil Spill Region Environmental Coalition represents environmental interests. The coalition consists of the Prince William Sound Conservation Alliance, Alaska Marine Conservation Council, Alaska Center for the Environment, Kodiak Conservation Network, Kodiak Audubon Society and Nunagpet/CEPC. The latter is a coalition of the villages of Tatitlek, Chenega Bay, Port Graham and Nanwalek.

#### **d) Activities**

**(1) RCAC has reviewed the operations and maintenance of terminal and tankers through the following activities:**

##### **(i) review of terminal operations and maintenance**

Terminal Maintenance – RCAC is following progress on repairs to piping in the existing tank farm vapor recovery system. A consultant has been retained to review terminal maintenance activities and plans. RCAC continues to monitor uncontrolled venting of hydrocarbon vapors and leaks in the piping system, when they occur.

Control of Tanker Loading Vapors – RCAC monitored progress on planning and construction of vapor controls at the terminal's loading berths. RCAC also retained consultants to review the quality and timeliness of installation of the tanker loading vapor control system.

Ballast Water Treatment Facility – RCAC continued to work with Alyeska Pipeline Service Company and regulatory agencies on issues related to the Ballast Water Treatment Facility at the Valdez Marine Terminal. The treatment facility discharges an average of almost 16 million gallons of treated effluent into Port Valdez per day.

- Ballast Water Treatment Facility Working Group – RCAC participates in the BWTF Working Group. This group, chaired by the ADEC, provides a forum to present and discuss information on new and re-occurring issues, to develop a balanced information base on a particular issue related to monitoring activities at the Alyeska BWTF. The group works to build an understanding of issues and to arrive at recommendations for the US EPA and the ADEC. In addition to RCAC and ADEC, the working group includes representatives of EPA, Alyeska Pipeline, the Technical Advisory Group and representatives of ANS shippers.

- National Pollutant Discharge Elimination Systems (NPDES) Permit – RCAC continued to work with Alyeska, the U.S. Environmental Protection Agency and the Alaska Department of Environmental Conservation on a new pollution discharge permit for the Valdez Marine Terminal. RCAC prepared and submitted comments to the EPA on the proposed permit, and prepared and submitted comments on the state's certification of the proposed new permit. Following the release of sheen from the ballast water treatment facility in January 1997, RCAC sought changes to provide better monitoring of the effluent's oil content.

- Ballast water influent monitoring – In early 1997, RCAC resumed a program to monitor ballast water discharged by tankers into the ballast water treatment facility at the Valdez Marine Terminal. The purpose of the program is to determine whether

ballast water arriving at the terminal contains compounds not anticipated for treatment. Because samplings are not announced in advance, the program may also deter discharge of unauthorized substances. An earlier monitoring program, conducted jointly by RCAC and the Alaska Department of Environmental Conservation, ended in 1995.

**(ii) review of tanker operations and maintenance**

Prince William Sound Tanker Risk Assessment – As a member of the Steering Committee directing the Prince William Sound Risk Assessment, RCAC reviewed the risks of oil transportation in Prince William Sound. The 18-month study was funded by RCAC, major oil shipping companies and the U.S. Coast Guard. The study identified and ranked the risks of oil spills from tankers in Prince William Sound, and identified measures to reduce the risks. After the study was completed, RCAC continued to work with industry and regulators on subcommittees formed to develop a risk management plan. These subcommittees are addressing tanker escorts, waterways management, and vessel management.

Tug escorts – RCAC also participated in projects separate from but related to the Prince William Risk Assessment. RCAC observed sea trials of different tugs and tug technologies, helped develop state regulations for escort standards, and worked with industry and regulators on task forces dealing with different aspects of tug escorts. RCAC was an integral participant in the work leading up to decisions by shippers to enhance escort tugs in service.

Tanker Integrity – In light of a series of structural failures reported aboard TAPS tankers in 1995, RCAC began compiling a data file of each of the vessels calling at Valdez. The file includes information on vessel particulars including size (length/beam), cargo carrying capacity (barrels), year built, vessel owner/operator, double hull replacement date, and any reported damage to the vessel. This document is updated constantly as new information is obtained.

RCAC and Alyeska/SERVS have held a series of discussions regarding SERVS Tank Vessel Screening Program, which evaluates tanker integrity, safety and prevention methods. RCAC continues to work closely with ADEC and various shippers regarding immediate notification of any deficiencies or structural failures found aboard TAPS tankers. The process has improved in recent months, and RCAC is regularly notified of incidents as they occur.

**(2) Review of oil spill prevention and response plans**

State tanker plans – No plans were submitted for review this year, but RCAC monitored and commented on the plan holders' progress toward compliance with the conditions of approval. The conditions of approval included use of "best available technology," information about response equipment delivery times, and interim enhancements to tanker escorts through Valdez Narrows. RCAC participated in a working group established to clarify "best available technology" regulations.

Valdez Marine Terminal Plan – RCAC did several reviews of the Valdez Marine Terminal Contingency Plan at different stages of the review process. RCAC's core comments were submitted 6/30/96. Before and after the state issued a final conclusive consistency determination in December, RCAC participated in additional meetings and discussions regarding major issues associated with the plan.

#### Area Plans

- RCAC participates in the Alaska Regional Response Team Sensitive Areas Working Group. RCAC seeks to ensure that contingency plans incorporate the requirement for local knowledge of sensitive areas in contingency planning.
- RCAC reviewed and submitted comments (4/30/96) to the Alaska Department of Environmental Conservation (ADEC) on the Prince William Sound Subarea Contingency Plan.
- RCAC reviewed and submitted comments (6/30/96) to ADEC on the Cook Inlet Subarea Contingency Plan.
- RCAC reviewed and submitted comments (10/10/96) to ADEC on the Kodiak Subarea Contingency Plan, and continues to participate in the subarea planning process.
- RCAC is funding a project to facilitate local involvement in and assist in the development of a federal/state/local subarea contingency plan for the Kodiak region.

Out-of-Region – State oil spill contingency plans require plan holders to arrange for spill response equipment from outside the region in case of a catastrophic oil spill. In an effort to "ground truth" provisions on the tanker spill plans for Prince William Sound, RCAC evaluated and monitored the process and planning necessary to bring in out-of-region spill response equipment. As part of this project, RCAC developed a baseline field monitoring program to permit future analysis of equipment availability and accessibility.

SERVS – Over the course of several exercises a series of incidents were observed that led to questions about the readiness of some SERVS equipment and personnel. While none of them alone would have raised any strong concern, taken together they hinted at a direction that might have indicated a decline in SERVS response capabilities. RCAC compiled a list of questions and met with Alyeska/SERVS representatives. Although some questions remain, most of the issues were addressed and some changes have since been made. Alyeska and RCAC agreed to continue meeting on the subject, and discussions regarding training and associated readiness issues will continue.

### **(3) Work done to monitor drills and cleanup of actual discharges**

Drill Monitoring – RCAC retains a drill monitor to observe and report on Alyeska/SERVS drills and exercises. These exercises occur two to three times per month. Each exercise observed by the drill monitor is followed by a written report that is distributed to the Response Planning Group (shippers) as well as various Alyeska/SERVS personnel and RCAC volunteers. In order to facilitate better relationships with industry and to make the regular Alyeska/SERVS drills more effective, RCAC provides a preliminary copy of its reports to SERVS prior to broader distribution. Often SERVS personnel comment on the preliminary reports, and their comments are addressed in the final RCAC reports. The drill monitor's annual report contains an overview of the effectiveness of drills and exercises at SERVS and recommendations for improvement in the future.

For major spill drills, RCAC fields a response team, just as it would in an actual spill. Its job is to observe the spill and response efforts, independently verify information disseminated by official sources, inform citizens in the impacted region and advise incident command. RCAC submits written comments, observations and critiques after each drill monitored. In addition to observing routine drills and exercises over the past year, RCAC monitored a Valdez Marine Terminal drill (May 96), Chevron drill (August 96), and Tesoro drill (October 96). RCAC also monitored a series of tug trials. Approximately 40 drills and exercises were monitored in the year ending March 31, 1997.

Incident & Spill Monitoring – RCAC routinely monitors casualties, incidents, oil spills, port closures and potential problems occurring at the terminal, the port or on tankers.

Over the past year, RCAC monitored approximately a dozen incidents and atypical events. These included unusual transits, small leaks and spills oil, a structural fracture, an orphan spill in Kodiak, tanker engine problems, a small fire, and a barge adrift. RCAC alerted shippers to potentially dangerous conditions in mid September, when RCAC's iceberg monitor observed a great increase in black ice in the Sound.

RCAC activated its emergency response plan January 10, when a sheen of unknown origin appeared near one of the loading berths. Under its emergency response plan, RCAC has four primary tasks to perform during a spill: observe, verify, inform, and advise.

RCAC maintained observers in the field to report on the sheen and the clean up efforts, sent periodic updates to the RCAC Board of Directors and their member organizations, advised the incident command, and checked information relayed to the public.

RCAC representatives also participated in the team organized by Alyeska to investigate the root cause of the sheen, which was a design flaw in the air strippers of the ballast water treatment facility.

#### (4) Review or coordinate scientific studies with recognized expert

Prince William Sound Risk Assessment Study – The methodology used in this study was peer reviewed by the Marine Board of the National Research Council. Members of the reviewing committee are:

- Elisabeth Pate-Cornell (Stanford University)
- John F. Ahearne (Duke University)
- Elizabeth S. Bouchard (SEALAW Group)
- Philip M. Diamond (aerospace and defense consultant)
- Michael J. Donohoe (marine safety consultant)
- Paul S. Fischbeck (Carnegie Mellon University)
- John B. Garrick (PLG, Inc.)
- Eugene M. Kelly (Amoco Marine Products)
- Thomas M Leschine (University of Washington)
- Charles Massey (Sandia National Laboratories)
- Robert A. Santos (Hvide Marine, Inc.)
- Bernard Stahl (Amoco Worldwide)
- Steven R. Winterstein (Stanford University)

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Long-Term environmental monitoring program (LTEMP) – The following people were consulted to ensure that the LTEMP was not duplicating other field research efforts this summer. The following experts were consulted:

- Keith Kvenvolden, Ph.D Geology, geologist with the U.S. Geological Survey
- Gunnar G. Lauenstein, Mussel Watch Project Manager, National Oceanic and Atmospheric Administration
- Stanley E. Senner, Science Coordinator, Exxon Valdez Oil Spill Trustee Council
- David L. Nebert, Assistant Director, Institute of Marine Science, University of Alaska, Fairbanks
- Dr. G.L. Thomas, Ph.D., Prince William Sound Science Center
- Susan Saupe, Science Coordinator, Cook Inlet Regional Citizens' Advisory Council
- Stanley Rice, Ph.D. Comparative Physiology (directs habitat investigations and EVOS damage assessment at NOAA's Auke Bay Lab)

- Richard T. Prentki, Ph.D. Minerals Management Service
- Jeffrey W. Short, NMFS Auke Bay Laboratory

Dispersants Literature Review – This project was initiated in October 1996. S.L. Ross Environmental Research Ltd. was contracted to write an overview of the literature relevant to dispersant use on Alaska North Slope crude oil in Prince William Sound and the Gulf of Alaska. A peer review of the report occurred in January 1997. The following experts provided peer review comments:

- Alan Mearns, Ph.D, NOAA HAZMAT
- Rebecca Hoff, NOAA HAZMAT
- Ronald Tjeerdema, Ph.D. Pharmacology and Toxicology, Associate Professor of Toxicology, U.C. Santa Cruz
- Michael Martin, Ph.D. Staff Toxicologist, Dept. of Fish and Game, State of Calif.
- Merv Fingas, Environment Canada

In-situ Burning Literature Review – This project was initiated in October 1996. S.L. Ross Environmental Research Ltd. was contracted to write an overview of the literature relevant to *in-situ* burning use on Alaska North Slope crude oil in Prince William Sound and the Gulf of Alaska. A peer review of the report occurred in January 1997. The following experts provided peer review comments:

- Gary Shigenaka, Marine Biologist, Biological Assessment Team, NOAA HAZMAT
- Nir Barnea, NOAA HAZMAT
- Ron Ferek, Ph.D. Office of Naval Research

Bioremediation Literature Review – This project was initiated in December 1996. Dames and Moore was contracted to write an overview of the literature relevant to shoreline bioremediation use on Alaska North Slope crude oil in Prince William Sound and the Gulf of Alaska. A peer review of the report occurred in March 1997. The following experts provided peer review comments:

- Albert Venosa, Ph.D. USEPA
- Brian Wrenn, Ph. D. Environmental Technologies & Solutions, Inc.
- Rebecca Hoff, NOAA HAZMAT
- Kenneth Lee, Ph.D. Fisheries and Oceans Canada

Ballast water influent sampling – The laboratory analysis of ballast water samples is conducted by Analytica Alaska. EVS Environment Consultants reviews analysis reports for compliance with quality assurance objectives.

Ecological Risk Assessment in Port Valdez – In a cooperative project of RCAC and Alyeska, scientists undertook a new approach to questions about pollution in Port Valdez. The Ecological Risk Assessment in the port is a comparative study of the environmental impacts from all sources on Port Valdez. RCAC's consultants on this project were:

- Wayne G. Landis, Ph.D. Zoology. Director and Professor, Institute of Environmental Toxicology and Chemistry, Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington.
- Janice Wieggers, Ph.D. Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington.
- David G. Shaw, Ph.D. Institute of Marine Science, University of Alaska Fairbanks
- Howard M. Feder, Ph.D. Institute of Marine Science, University of Alaska Fairbanks



**(5) Activities to review developments in spill prevention and clean-up technology**

- Spill prevention technology – As described above, RCAC has worked extensively the past year, through the Prince William Sound Risk Assessment and other projects, to identify and compare new and existing technologies for reducing the risk of oil spills. These include different propulsion systems on escort tugs, navigational aids, tracking systems, ice-detecting equipment and a study of glacier activity related to icebergs in the vessel traffic lanes.
- Clean up technology – RCAC monitors new technology through literature review and first-hand observation of testing and use of new response tools. Specific activities over the past year included the following:
  - \* Dispersants, burning and bioremediation: RCAC retained consultants to gather the latest information on the use of these as spill response tools. The resulting reports will assist the Board of Directors as it formulates policies and recommendations for how when these tools should be used in Prince William Sound and the Gulf of Alaska.
  - \* Spill trajectory model: RCAC monitored the development of an oil spill trajectory model for lower Cook Inlet and approved funding to begin expanding the model into the Gulf of Alaska.
  - \* Weather data: RCAC began investigating ways to use archived weather data gathered in Prince William Sound and the Gulf of Alaska to determine how often certain conditions occur. This information may be useful for projecting spill trajectories and other weather related factors which can impact prevention and response capabilities.
  - \* RCAC keeps abreast of efforts in other areas by sending representatives to meetings of the States/BC Oil Spill Task Force, the International Oil Spill Conference, AMOP, and the Valdez Oil Spill Prevention Symposium.

**(6) Review of port operations, organizations, safety systems and incidents, and recommendations made to promote safer transportation of oil**

**(i) Review of port operations, organizations, safety systems and incidents**

- RCAC contacted the National Oceanographic Data Center in Washington, D.C. regarding archived weather station data in the Gulf of Alaska and Prince William Sound. RCAC plans to incorporate the archived weather data into a usable database.
- RCAC regularly interfaces with MSO Valdez personnel regarding operation of the vessel traffic system.
- RCAC regularly attends meetings on the Vessel Escort Response Plan, as well as meetings of the Valdez Marine Operations Committee.
- The Prince William Sound Risk Assessment, which was co-sponsored by RCAC, included an assessment of risks and corresponding risk reduction measures, related to port operations and safety systems. The study addressed such issues as vessel traffic management (esp. between fishing vessels and tankers), and improvements in navigational aids and vessel tracking systems.

ASTM Vessel Escort Task Group – RCAC is a member of the American Society for Testing and Materials (ASTM) Vessel Escort Task Group, organized by the U.S. Coast Guard to develop an ASTM standard for vessel escort selection criteria and the methodology which would be

followed to make the tug selection decision. In addition to RCAC, the task group includes representatives of the oil and maritime industries, regulatory agencies and environmental organizations. Over the past year, RCAC attended meetings and reviewed drafts of the guidelines for selection of escort vessels.

Fire Protection – RCAC is working to improve marine fire fighting response planning and response capabilities and to monitor fire fighting capability, training, drilling and equipment maintenance at the terminal. In 1996, RCAC retained a consultant to conduct an independent study of marine fire response and emergency planning for Prince William Sound. The consultant reviewed and analyzed the adequacy of fire fighting resources, and reviewed model fire response plans to determine potential improvements for Prince William Sound. Based on the consultant's report, RCAC recommended steps to improve fire response coordination and planning. (See below, under "Recommendations to promote safer oil transportation"). Following up on its recommendations, RCAC participated in meetings of the Fire Protection Task Force, monitored amendments to the U.S. Coast Guard's Prince William Sound Fire Response Plan, and prepared to sponsor a week-long symposium. The symposium, to be held the first week of June, will train land-based fire fighters in response to fire on board vessels.

Incidents – RCAC routinely monitors incidents and atypical situations in the port, such as vessel traffic congestion, power outages that affect vessel movement, and weather-related closures.

## **(ii) Recommendations to promote safer oil transportation**

Fire response – In response to an independent analysis of fire response in the Prince William Sound region, RCAC in September 1996 recommended the following measures:

- Revisions to the U.S. Coast Guard's fire response plan for Prince William Sound;
- Formation of a maritime incident response team to provide technical expertise to an incident commander;
- Development of a marine fire fighting training program to teach land-based fire fighters how to assist in a marine incident; and
- Acquisition of a portable air compressor to allow expanded use of self-contained breathing apparatus.

Cook Inlet Subarea Contingency Plan - In detailed comments on the May 1996 Public Review Draft of the Cook Inlet Subarea Contingency Plan, RCAC made the following recommendations:

- Establish contingencies to deal with a major fire or explosion that could be associated with an oil/hazardous substance spill, well head blowout, or salvage operation
- Government procure term contracts with response organizations to ensure immediate federal response capability.
- Plan should clarify the scope of use of commercial fishing vessels.
- Define requirements for evaluating compatibility between federal and non-federal plans regarding sensitive areas issues.
- Clarify and specify the roles and responsibilities of municipalities and local entities in the unified command.
- Provide more detail on response strategies, including detail about equipment, personnel, transportation and sensitive areas.

Kodiak Subarea Contingency Plan – In detailed comments on the 1994 Kodiak Island Area/Regional Contingency Plan (aka Subarea Plan), RCAC made the following recommendations:

- A simpler and more user-friendly format to ensure maximum usefulness in a spill
- Include requirements for at least annual drills of the plan
- Appendix needs to establish protection and response priorities for sensitive areas, and address response capabilities or procedures for such areas.
- Plan should clarify the scope of use of commercial fishing vessels.
- Define requirements for evaluating compatibility between federal and non-federal plans regarding sensitive areas issues.
- Provide more detail and specificity in the scenarios.

Prince William Sound Subarea Contingency Plan – In detailed comments on the Prince William Sound Subarea Contingency Plan (February 1996 Public Review Draft), RCAC made the following recommendations:

- Address fire fighting and explosion that could be associated with an oil spill
- Include language to explain how this plan and other major response plans in the area, and adjacent subarea plans, are integrated.
- Government procure term contracts with response organizations to ensure immediate federal response capability.
- Alaska Regional Response Team conduct additional toxicity and effectiveness testing of Corexit 9527 to determine appropriate use for Prince William Sound.
- More detail and specifics in the oil spill scenarios.
- Clarify and specify the roles and responsibilities of municipalities and local entities in the unified command.
- Plan should clarify the scope of use of commercial fishing vessels.

State Standard of "Best Available Technology" – The State of Alaska requires the use of best available technology in oil spill prevention and response. In comments on draft regulations to define "best available technology," RCAC recommended that spill response equipment be evaluated periodically to ensure that recent technological developments are considered and used when appropriate. RCAC participated in a working group set up to define the regulations.

Nearshore Response – RCAC recommended improvements to nearshore response plans submitted by tanker spill plan holders. RCAC questioned the adequacy of fishing vessels to meet state requirements, ability to rapidly deploy skimmers and storage barges, storage capacity for recovered liquids, and nearshore response implementation.

RCAC also developed a proposed model for community-based nearshore strike teams. The strike teams would be trained and equipped to respond to small coastal spills and participate in the coordinated response to larger spills. The proposal would provide cost effective spill response capability through cost sharing and in-kind contributions of the participants.

Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan – In comments to the state on the draft plan, RCAC made the following recommendations:

- The state review fire fighting response concurrently with the oil spill contingency plan.
- Permits for pre-approved in-situ burning and use of emulsifiers be obtained for certain specific conditions.

- Secondary containment facilities be repaired and maintained to ensure they are impermeable.
- Earthquake engineering employed in terminal construction should be evaluated in light of more information and experiences over the past 25 years since the terminal was built.

Out-of-Region Response Equipment – RCAC analyzed the availability and accessibility of equipment that would be brought into Prince William Sound from other areas, in the event of a major oil spill. The report concluded that several considerations are paramount in moving out-of-region equipment:

1. Early recognition of spill size and immediate equipment request.
2. Identification of transportation from airport/staging area to dock loading facility.
3. Time constraints moving equipment from dock to vessels and transportation to spill site.

The report found that plans still lack sufficient intermediate storage capacity for recovered oil and water. Intermediate storage was a big problem in the response to the Exxon Valdez oil spill. The report made the following recommendations:

- Address immediately the shortfall of suitable primary and secondary storage units.
- SERVVS or shippers work with individual oil spill response organizations to pre-identify packages of suitable equipment for use in Prince William Sound.
- Alaska oil spill response organizations develop mutual aid plans within the state including pre-identifying suitable equipment packages and mitigating measures for continued operations.
- Nationwide oil spill response organizations begin developing mutual aid agreements toward the establishment of a national plan for providing equipment at the scene of a catastrophic spill while maintaining adequate equipment regionally. Marine Spill Response Corp. has a plan for cascading equipment along these lines, however most of the smaller oil spill response organizations do not.
- The Alaska Department of Environmental Conservation develop a system of call in drills. As a proposed designed, controllers would inform an individual shipper of a simulated spill. Shipper would contact equipment supplier and supplier would call back to controllers giving equipment it would ship; transportation schedule and ETA.

Mutual aid agreements in spill response – Based on a situation that arose during a "maximum discharge" drill in October 1996, RCAC recommended that spill response organizations in Alaska develop mutual aid agreements and that they develop plans delineating the amount of equipment that can be released. Failure to develop such agreements and plans could lead to a situation in which too much of one area's resident response equipment has been deployed elsewhere. During the exercise in question, Tesoro requested, SERVVS offered and ADEC approved release of extensive equipment from Prince William Sound, while still allowing tanker transits.

#### **(7) Implementation of environmental monitoring strategy**

RCAC does not have an overall environmental monitoring strategy of its own, because to do so would duplicate Alyeska's environmental monitoring program. However, RCAC reviews and monitors Alyeska's monitoring strategy and periodically recommends enhancements. RCAC does conduct its own environmental monitoring program to establish baseline hydrocarbon levels in the water column and sediments.



## **(8) Environmental projects undertaken**

Long Term Environmental Monitoring Program – Under this program, baseline data is collected on hydrocarbon concentrations at specific sites in Prince William Sound and the Gulf of Alaska. Intertidal mussels were sampled in March and July for polycyclic aromatic hydrocarbons. Shallow sediments at most stations were monitored twice for polycyclic aromatic and aliphatic hydrocarbons. Deep sediment monitoring was conducted once a year at each of the sites.

The study also identifies the source of any hydrocarbons present. The data provide a benchmark for assessing the impacts of oil transportation and future oil spills. The monitoring program is now in its fourth year.

Caged mussels pilot project – In February 1997, RCAC began a pilot test to determine the usefulness of employing caged mussels to monitor exposure to hydrocarbons in the effluent discharged from the terminal's ballast water treatment facility. The pilot test involves placing mussels in cages at a significant depth at different locations relative to the outflow site from the ballast water treatment facility. The mussels will be retrieved after 60 days, then weighed and measured to gauge their ability to survive and grow in Port Valdez.

Port Valdez Environmental Monitoring – RCAC is working on several fronts with Alyeska, the Alaska Department of Environmental Conservation and the Environmental Protection Agency regarding programs to detect the impact of ballast water effluent on the environment of Port Valdez. These activities may lead to enhancements to Alyeska's existing environmental programs.

In a cooperative project of RCAC and Alyeska, scientists undertook a new approach to questions about pollution in Port Valdez. The ecological risk assessment was a comparative study of the environmental impacts from all sources on Port Valdez. Ultimately it may provide a more definitive picture of the extent of problems, if any, in the port's marine ecosystem, and the source or sources of those problems. The project could help identify the effect of the ballast water treatment facility on the marine environment of Port Valdez. The project included public meetings in Valdez to elicit public concerns and local knowledge about potential "stressors" on Port Valdez.

## **(9) Environmental conditions and locations monitored**

Long-term Environmental Monitoring Project (LTEMP) – The fifth year of monitoring has begun in a program that collects baseline data on hydrocarbon concentrations at specific sites in Prince William Sound and the Gulf of Alaska. Intertidal mussels were sampled in March and July for polycyclic aromatic hydrocarbons. Shallow sediments at most stations were monitored twice for polycyclic aromatic hydrocarbons. Deep sediments at most stations were monitored once during the year, as the numbers have been stable.

The study also identifies the source of any hydrocarbons present. The data provide a benchmark for assessing the impacts of oil transportation and future oil spills. Results are presented in a year-end annual report. Samples are collected at the following locations: Alyeska Marine Terminal, Gold Creek, Sheep Bay, Sleepy Bay, Knowles Head, Disk Island, Aialik Bay, Windy Bay, and Shuyak Harbor.

#### **(10) Environmental impacts assessed**

Mussels & sediments: The presence of hydrocarbons in mussels and sediments, and the source of any hydrocarbons found, are monitored in the Long Term Environmental Monitoring Program. Samples are taken from sites oiled by the Exxon Valdez oil spill, and from un-oiled sites.

Ecological Risk Assessment: The model of ecological risks developed under this project could become an important tool in assessing the ecological impacts of the ballast water treatment facility and other risk sources associated with the Valdez Marine Terminal.

Non-Indigenous Species: Eventually, RCAC hopes to learn whether non-indigenous aquatic species transported in tanker ballast water are affecting native habitat and species.

Caged mussels: This pilot project will determine the usefulness of using caged mussels to assess the impacts of effluent from the ballast water treatment facility on the marine environment in the vicinity of the facility diffuser.

#### **(11) Scientific experts, universities and scientific institutions consulted**

Columbia Glacier Study – RCAC's consultants on this project are:

- Wendell Tangborn, Hydrologist, Principal, Hymet Inc., Seattle, WA
- Austin Post, Research Hydrologist, GS 13-8 (retired), U.S. Geological Survey; part time USGS Ice and Climate Project, University of Puget Sound, Tacoma, WA; volunteer, International Polar Programs, Reston, VA.
- William St. Lawrence, Ph.D., Civil Engineer, Polar Alpine, Inc., Berkeley, CA
- Dennis Trabant, hydrologist, U.S. Geological Survey, Fairbanks, Alaska
- Robert Krimmel, U.S. Geological Survey

Long Term Environmental Monitoring Program – The monitoring is conducted by Kinnetic Laboratories, Inc. The laboratory work is conducted by Texas A&M's Geochemical and Environmental Research Group (GERG).

Community Impacts Planning - Mental Health – “Community Impacts Planning: Demonstration Project for Mental Health and Coping Strategies” was initiated in February of 1995. The project was conducted by Dr. J. Steven Picou, Professor and Head of the Sociology and Anthropology Department at the University of South Alabama. The following experts reviewed and assisted in the project:

- Catalina Mandoki Arata, Ph.D., Asst. Professor, Department of Psychology, University of South Alabama; specialties of women's issues, sexual abuse, adolescent treatment, and community consultation.
- Larry B. Christensen, Ph.D., Chair, Dept. of Psychology, Univ. of South Alabama.
- Maurie J. Cohen, Ph.D., Asst. Professor of Urban and Environmental Planning, School of Public and Environmental Affairs, Indiana University; specialties of economic impacts of technological accidents and catastrophic events.
- Arthur G. Cosby, Ph.D., Director, Social Science Research Center, Mississippi State University.
- Stephen R. Couch, Ph.D., Professor, Department of Sociology, Pennsylvania State University; specialties of technological hazards and disasters and of science, technology and society.
- Duane A. Gill, Ph.D., Assoc. Professor, Department of Sociology, Anthropology, and Social Work, Mississippi State University; specialties of environmental sociology, community, social impact assessment, human ecology and social change, sociology of disasters.

- G. David Johnson, Ph.D., Assoc. Professor, Department of Sociology & Anthropology, University of South Alabama.
- Dean G. Kilpatrick, Ph.D., Professor, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina; specialties of traumatic stress, victimization, and rape.
- J. Stephen Kroll-Smith, Ph.D., Professor, Department of Sociology, University of New Orleans; specialty of social and cultural effects of technological hazards and disasters.
- Arvind K. Shah, Ph.D., Professor of Statistics, Department of Mathematics and Statistics, University of South Alabama, specialty of statistical analysis of data.

Prince William Sound Shipping Risk Assessment Project – The study team was composed of experts from Det Norske Veritas Technica, George Washington University and Renssalaer Polytechnic Institute. The methodology was peer reviewed by the National Research Council Committee on Risk Assessment and Management of Marine Systems, National Academy of Sciences. The project team was composed of:

- John R. Harrald, Ph.D., Dept. of Engineering Management, The George Washington University
- Martha Grabowski, Ph.D., Dept. of Decision Sciences and Engineering Systems, Renssalaer Polytechnic Institute.
- Capt. John L. Acomb, Fleet Manager, Matson Navigation, Inc.
- Emil Dahle, Ph.D., Senior Surveyor, DNV Safety, Quality and Environ. Services

#### Ecological Risk Assessment of Port Valdez

- Wayne G. Landis, Ph.D. Zoology. Director and Professor, Institute of Environmental Toxicology and Chemistry, Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington.
- Janice Wieggers, Ph.D. Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington.
- David G. Shaw, Ph.D. Institute of Marine Science, University of Alaska Fairbanks
- Howard M. Feder, Ph.D. Institute of Marine Science, University of Alaska Fairbanks

#### Environ. monitoring in Port Valdez/Ballast water treatment facility /NPDES permit

- Peter M. Chapman, Ph.D. Benthic Ecology, EVS Environment Consultants.
- John Karinen, Marine Biologist, NOAA, NMFS, Auke Bay Laboratory.
- Yoram Cohen, Ph.D., chemical engineering, Multimedia Envirosoft, Associate Professor, UCLA
- Sandra Salazar, M.S. biology, Applied and Michael Salazar, M.S. marine biology, Applied Biomonitoring, Kirkland, WA. (caged mussels pilot project)

#### Ballast Water Treatment Influent Monitoring

- Kim Magruder, Environmental Scientist, EVS Environment Consultants.

#### Non-indigenous species introductions via ballast water

- Anson H. "Tuck" Hines, Ph.D., marine ecologist and Assistant Director, Smithsonian Environmental Research Center, Maryland.
- James T. Carlton, Ph.D., Director, Maritime Studies Program, Williams College/Mystic Seaport Mystic, Connecticut
- Gregory M. Ruiz, Smithsonian Environmental Research Center, Maryland
- John Chapman, Ph.D., Hatfield Marine Science Center, Oregon State University
- Gayle Hansen, Ph.D., Hatfield Marine Science Center, Oregon State University

RCAC is also working with the U.S. Fish and Wildlife Service, University of Alaska Fairbanks, Alyeska Pipeline Service Company, major shippers, and scientists and regulators in British Columbia, Washington, Oregon, California, and Hawaii.

**(e) Abstracts of ongoing reports and studies related to minimizing impacts of operations of terminal facilities and crude oil tankers.**

Non-indigenous species – RCAC has undertaken several projects on the issue of non-indigenous species coming into Prince William Sound, and especially the Port of Valdez, via tanker ballast water. So-called aquatic nuisances have created enormous biological and economic problems in waterways throughout the world and ballast water is widely considered to be the number one source of such invasions. Prince William Sound may also be at risk of such an invasion; indeed, such invasions may already have taken place. RCAC is taking the lead in efforts to determine what non-indigenous species have invaded Prince William Sound and what effects they are having or might have.

- RCAC and the U.S. Fish and Wildlife Service co-sponsored “Aquatic Nuisance Species in Prince William Sound: A First Look,” a workshop in Anchorage, March 25. The workshop featured national experts and was the first conference in Alaska to address this issue.
- Representatives of more than 20 industrial, environmental, regulatory and scientific entities are participating in a working group organized by RCAC to address nonindigenous species. The group, which is meeting monthly, is the only group in Alaska dealing with the issue. Among the participants in this working group are several noted Alaskan scientists, including Dr. Peter Armato, National Park Service; Dr. Robert Benda, Prince William Sound Community College; Dr. Howard Feder, University of Alaska Fairbanks; Dr. Nora Foster, University of Alaska Museum; Dr. David Hite, geological consultant; Dr. John Karinen, National Marine Fisheries Service; and Dr. Gary Thomas, Prince William Sound Science Center.
- RCAC retained the Smithsonian Environmental Research Center to conduct a pilot study of aquatic nuisance species brought into Prince William Sound by oil tankers. The project is jointly funded by the U. S. Fish and Wildlife Service. The consultants have completed a literature search and a preliminary list of likely invaders. In late May they will collect samples of ballast water from tankers which will be analyzed for species composition and abundance. The pilot project is to be completed by Sept. 30.
- The U. S. Coast Guard also will participate in RCAC’s pilot study in order to fulfill a mandate in the National Invasive Species Act of 1996, which requires the Coast Guard to study the ability of Alyeska’s ballast water treatment facility to treat aquatic organisms in ballast water.
- RCAC is part of a group that submitted a grant proposal to the National Sea Grant College Program for funds to extend the pilot study in Prince William Sound for two years. Partners in the proposal are the Smithsonian Environmental Research Center, University of Alaska, Oregon State University, U.S. Fish and Wildlife Service, and Alyeska Pipeline Service Co. If the grant is approved, the extended study will, among other things, continue to examine arriving ballast water, examine tanker ballast intakes for signs of fouling by nonindigenous species, and conduct sampling within Port Valdez for nonindigenous species.
- RCAC is participating in efforts to develop regional panels to address research and policy needs related to aquatic nuisance species. The National Invasive Species Act of



1996 directed the aquatic nuisance species task force to encourage the development of such regional panels throughout the country.

Community impacts: Mental health impacts demonstration project – RCAC is funding and directing this project, to provide communities with tools to help them deal with the mental health impacts of a major technological disaster, such as a catastrophic oil spill. The 1989 oil spill had sometimes severe impacts on some communities: there was social disruption, social dislocation, work disruption, psychological stress, family disruption, subsistence disruption, economic loss, depression and psychological impairment.

Strategies were developed to help people and communities cope with these impacts. In 1996, these strategies were tested in Cordova, one of the communities hit hardest by the oil spill. The pilot project was evaluated and a guidebook is being prepared to enable other communities to apply those strategies determined to be effective. The final report and guidebook will be completed in June.

Community impacts: Technical – RCAC is developing tools to help communities respond to an oil spill, with emphasis on community response planning and communications during an oil spill. The objective is to lessen the impacts of oil spills on humans and their communities. A model community response plan is being developed, incorporating concepts such as integrating community response with local emergency response plans, and avenues for information dissemination. The model plan should be completed later this year.

Columbia Glacier Monitoring – RCAC has retained a team of experts to conduct a study of the Columbia Glacier and the icebergs it releases into Columbia Bay. Their findings may help oil tankers and other vessels predict and avoid heavy ice in the traffic lanes. Icebergs pose a significant risk to oil tankers, and consultants predict that for the next few years, iceberg hazards will get considerably worse.

The underlying goal of the study is to be able to predict heavy ice in the tanker lanes. The primary objective of the project is to develop two computer models. One will predict iceberg calving rates of Columbia Glacier for the next 10 to 40 years. The other will predict the discharge – volumes, velocities and time distribution – of icebergs into Prince William Sound.

The data is coming from aerial photography, time-lapse photography, weather and tide records, and hydrographic surveys. Aerial photography helps determine changes in glacier thickness, glacier flow speed and the rate of iceberg calving on a seasonal basis. Time lapse photography will determine the nature of iceberg calving and drift on a daily or even hourly basis. Three cameras are stationed at different sites to track calving from the glacier, ice breaking off the ice jam, and iceberg drift into the shipping channels.

Hydrographic, or water-depth, surveys are providing precise information about the depth of water at the moraine shoal and in the area exposed by the glacier's retreat. Water depth is important because it indicates the maximum depth of icebergs calving into the Sound, and provides major clues about how much ice calved each season since the drastic retreat began in 1983.

## **Addendum: RCAC Partnership questions**

(1) How has RCAC built and maintained open communications, and conducted frequent formal and informal discussions with industry and government?

Over the last several years, RCAC has developed standard operating procedures founded on the "no surprises" principle. Industry and government representatives are encouraged to attend and participate in council and committee meetings, and they are consistently provided with information in a timely manner. RCAC routinely solicits their comments and input.

While significant advances have been made in RCAC's relationship with Alyeska and oil shipping companies, continued improvement is needed. During the past year, there have been instances when Alyeska's actions were not in compliance with the protocol. Whenever these incidents have occurred, RCAC executives have discussed them with Alyeska executives. In each instance, assurances have been given by Alyeska that greater efforts would be made to assure that all their employees who come into regular contact with RCAC have a full understanding of the obligations inherent in this "no surprises" approach. Even though there have been some lapses, it is apparent that at the highest levels, Alyeska has made a commitment to work to improve the partnership.

RCAC continues to pursue the type of relationship with industry and government envisioned under OPA 90. We believe we have achieved it with government. Although there are relapses at times, there is no question that progress has been made in our relations with Alyeska and the shipping companies.

(2) How is RCAC working toward developing and fostering a relationship with the Area Committee through consultation and recommendations?

In addition to attending regularly scheduled Alaska Regional Response Team (ARRT) meetings, RCAC staff and volunteers have participated in the ARRT's Sensitive Areas Working Group, Wildlife Protection Working Group, and Kodiak Subarea Planning Subcommittee Working Groups during the past year. RCAC's participation in these groups is intended to facilitate the inclusion of local knowledge and participation in the contingency planning process.

In addition, RCAC is funding a project to facilitate local involvement in, and assist in the development of, a federal/state/local subarea contingency plan for the Kodiak region. RCAC also coordinates with Cook Inlet RCAC regarding the Cook Inlet Area Committee process.

(3) How is RCAC working to build cooperation rather than confrontation with industry and government by working with them to develop contingency plans and coordinate projects and recommendations, and keeping them informed?

- In the past year, RCAC participated in the design, development, control and evaluation of two major drills (Chevron and Valdez Marine Terminal). After observing drills and exercises, and incidents, RCAC offers constructive comments and recommendations. RCAC also participates in drill debriefs.

- When concerns emerged within RCAC about training, staffing, and resource levels within Alyeska's Ship Escort/Response Vessel System (SERVS), RCAC met with Alyeska/SERVS to discuss the concerns and sort out areas in need of work. The concerns were addressed in a positive, constructive manner.

- Alyeska invited RCAC to participate in a working group established to identify the root cause of a sheen released from the ballast water treatment facility in January 1997. This is an example of the positive and respectful relationship that has developed between RCAC and Alyeska.

- In September 1996, RCAC immediately alerted Alyeska and the crude oil shippers to an increased flow of black ice from Columbia Bay. In response, one of the shippers' representatives wrote:

"Stan- Thanks for the info. We have sent to all our vessels. We have emphasized to our ships the need to be conservative in sailing through the ice areas at night and our full support for their awaiting daylight if in doubt about ice conditions. We appreciate RCAC's rapid circulation of this important notice. Bill"

- RCAC's work increasingly involves working groups and task forces that bring together citizens, regulators and industry to resolve problems and solve issues together. RCAC currently participates in more than half a dozen such working groups, ranging from ballast water treatment to tanker escorts, non-indigenous species to waterways management.

- RCAC developed two protocols in conjunction with industry in order to reach agreement on how the sampling of segregated and unsegregated tanker ballast water would be conducted in RCAC's influent monitoring and nonindigenous species projects.

- RCAC and Keystone Shipping Company have reached agreement over the availability of ballast exchange records. Through open communication and dialogue, Keystone agreed to provide RCAC with the records of ballast exchanges conducted by exporting oil tankers.

#### Response to 1996 Certification Letter from Adm. Card

Adm. Card suggested that RCAC address the issues raised by ARCO and Alyeska in their comments last year. Accordingly, find attached RCAC's direct responses to ARCO and Alyeska, which address the issues they raise.

# RCAC List of 1997-98 Proposed Budgets and Projects

ADMINISTRATION		PROJECT SUPPORT	COMMITTEES
100	Anchorage Administration	400 Project Support	500 Committee Support
101	Computer Support	401 Project Manager - Bridgman	501 TOEM Committee
200	Valdez Administration	402 Project Manager - Banta	502 OSPR Committee
300	Council Administration	403 Project Manager - Valdez	503 POVTS Committee
303	Council Meetings	404 Project Manager - Ka'aihue	504 SAC Committee
304	Executive Committee Meetings	405 Project Manager - Lewis	
		406 Project Manager - Kopp	
		407 Public Information	
		409 Community Liaison	
PROJECTS			
600	Contingency Fund	624 Port Operations	
601	Information Dissemination	625 Tanker Assessment	
602	Monitor Technology	626 Air Transportation	
603	Incident Monitoring	629 Vapor Control	
604	Drill Participation	630 "10 years later" symposium - new project	
605	Drill Monitor	631 Ballast Water Treatment/NPDES	
606	Recertification	632 Aquatic Nuisance Species	
607	LRP/Budget	633 Influent Monitoring	
608	LTEMP	634 Dispersants	
609	RCAC Internships -new project	635 In-situ Burning	
610	Outreach	636 Bioremediation	
611	LTEMP Data Analysis -new project	637 Scientific C-Plan	
612	Inside/Outside PWS	638 Field Implementation	
613	Participation	639 Glacier Study	
614	Comments to Regulators	640 Indigenous Knowledge - new project	
615	State Contingency Plans	641 Public Input - new project	
616	Terminal Maintenance	642 Sensitive Areas	
617	ACMP	643 CIP - Technical	
618	Federal C-Plans	644 CIP - Social	
619	Weather	645 Lowe/Copper River C-Plans - new project	
620	Escort System	646 Federal Affairs	
621	Fire Capability	648 Cook Inlet RCAC	
622	Monitor SERV'S -new project	650 State Legislation	
623	Human Factors	651 Internal Improvements	



**Anticipated Funds Available FY98**

Current Funds (5/1/97)	\$	1,523,316.00
Alyeska income, July 1, 1997	\$	1,050,000.00
Alyeska income January 1, 1998	\$	1,050,000.00
Interest income*	\$	127,502.00
Funds available	\$	<b>3,750,818.00</b>
Anticipated expenses		
FY97 Budget less YTD Expenses	\$	(890,628.00)
Total remaining funds	\$	<b>2,860,190.00</b>
Total anticipated funds FY98	\$	<b>2,860,190.00</b>

<b>DRAFT 1998 Budget</b>		
<b>Administration</b>		
100 (Anchorage)	\$	500,490.00
200 (Valdez)	\$	165,400.00
300 (Council)	\$	158,600.00
400 (Project Support)	\$	648,280.00
500 (Committees)	\$	112,098.00
<b>Total</b>	\$	<b>1,584,868.00</b>
Projects	\$	468,891.00
Unencumbered contracts	\$	556,431.00
<b>Total Projects &amp; Unencumbered contracts</b>	\$	<b>1,025,322.00</b>
Contingency	\$	250,000.00
<b>Total Draft Budget FY98</b>	\$	<b>2,860,190.00</b>

\*Interest based on average earned July 1, 1996-April 28, 1997.

FY97 budget: \$3,170,527

Contingency: \$667,418

**Total FY97 Budget: \$3,837,945**