

**OIL SPILL
RESPONSE
AND PLANNING**



Alaska State Legislature

HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES

POUCH V
JUNEAU, ALASKA 99811
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HOUSE RESOURCES COMMITTEE, OIL SPILL HEARING

Wednesday, January 17, 1990
3:00 to 5:00 p.m.
Capitol Room 124

SPILL RESPONSE AND CONTINGENCY PLANNING

Dennis Kelso - Commissioner
Department of Environmental Conservation
Post spill response planning, use of ICS and review of
industry contingency plans.

Frenchie Mallot - Department of Natural Resources, Forestry
Incident Command System and its utility for major oil spills.

Mike Williams - V.P. Environmental Planning and Control,
Alyeska Pipeline Service
Alyeska's proposed changes in both contingency planning and
response capability in Prince William Sound.

Robert Weatherford - Business Analysis Mgr.,
Exxon Shipping Co.
Contingency planning

Captain Bodron - Chief, Marine Safety Division
U.S. Coast Guard, Alaska
Regional Response Team and its role in response planning and
the Coast Guards On Scene Coordinator's report.

ALASKA OIL SPILL COMMISSION

300. Planning and Response Organization.

301. Spill and Response Activities and Coordination - General.

For pollution response activities, Federal on-scene coordination is accomplished through a single predesignated agent, the OSC, who presents information to and receives advice from the RRT. The EPA and USCG respond to incidents and provide predesignated On-Scene Coordinators (OSCs) within their respective areas. However, DOD will designate OSCs for hazardous substance releases from DOD facilities and vessels. The EPA will provide OSCs for oil discharges and hazardous substances releases into or threatening the inland zone and, unless otherwise agreed, for all planned removals and remedial actions. The USCG will provide OSCs for oil discharges, and for the immediate removal of hazardous substances, pollutants or contaminants into or threatening the coastal zone. The USCG will not provide predesignated OSCs for discharges and releases from hazardous waste management facilities or in similarly chronic incidents.

302. Regional Response Team.

A. This Plan uses the Alaska RRT as an advisory body to the OSC which enables Federal, State and local governmental agencies to participate in response to pollution incidents. The primary members include representatives of specified Federal agencies in each state as well as a designated State representative. These members are responsible for the coordination of all input from their respective agencies, as well as providing resources and other available assistance.

B. Federal Agency RRT Membership:

Agency	Representative
1. Dept. of Agriculture	U.S. Forest Service, Juneau, AK
2. Dept. of Commerce	National Oceanic and Atmospheric Administration, Anchorage, AK
3. Dept. of Defense	Commander, 6th Infantry Division, Fort Richardson, AK
	U. S. Army Engineer District, Alaska, Anchorage, AK

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| 4. Dept. of Energy | Richland Operations
Office, Richland, WA |
| 5. Dept. of Health and | HHS, Alaska Area
Human Services
Native Health Service,
Anchorage, AK |
| 6. Dept. of Interior | Regional Environmental
Officer, Anchorage, AK |
| 7. Dept. of Justice | U. S. Attorney,
Anchorage, AK |
| 8. Dept. of Labor | OSHA, Anchorage, AK |
| 9. Dept. of State | Department of State,
Washington, D. C. |
| 10. Dept. of
Transportation | Commander, Seventeenth
Coast Guard District,
Juneau, AK |
| 11. Environmental
Protection Agency | EPA Region X, Alaska
Operations Office,
Anchorage, AK |
| 12. Federal Emergency
Management Agency | FEMA Region X,
Bothell, WA |

C. State Agency RRT Membership:

- | | |
|-----------|--|
| 1. Alaska | Department Of
Environmental
Conservation, Juneau, AK |
|-----------|--|

D. Roles and Responsibilities of Federal RRT Member Agencies

1. The roles and responsibilities of the RRT member agencies are described below. Included also are each agency's resources and types of assistance that may be provided to the OSC. Each agency provides one member and at least one alternate member to the RRT.

2. The Department of Agriculture (USDA) provides expertise in managing agriculture, forest and wilderness areas. The Soil Conservation Service can be helpful in predicting effects of pollutants on soil and their movements over and through soil. The U. S. Forest Service (USFS) has responsibility for certain Federal lands. The USFS can provide local knowledge about communications, logistics, contractors, and equipment availability. They also have in-house radio communications, field housing, and air, land and water transportation capability within their areas.

3. The Department of Commerce (DOC), through the National Oceanic and Atmospheric Administration (NOAA), provides support to the NRT, RRT, and OSC with respect to living marine resources for which it has management authority, including marine fisheries, marine mammals and certain endangered species. They provide meteorological, hydrologic, ice and oceanographic data for marine, coastal and certain inland waters; tide and current information; charts and maps; and satellite imagery. In response to requests from the OSC, NOAA provides on-scene scientific assistance for releases in coastal and marine areas through the regional Scientific Support Coordinator (SSC). (See Section 300.34 for further SSC information.) NOAA acts on behalf of the Secretary of Commerce as a Federal trustee for living and nonliving natural resources in coastal and marine areas. Resources of concern to NOAA include all life stages, wherever they occur, of fishery resources of the exclusive economic zone and continental shelf; anadromous and catadromous species throughout their ranges; endangered and threatened species and marine mammals for which NOAA is responsible; tidal wetlands and other ecosystems supporting these living marine resources; and resources of National Marine Sanctuaries and Estuarine Research Reserves. For resources in coastal waters and anadromous fish streams, NOAA may be a co-trustee with the Department of the Interior, other Federal land managing agencies, and possible Indian tribes as well as the affected state. It will coordinate with co-trustees in investigating damages. Other DOC resources and support that can be provided are described below.

a. Through the National Weather Service (NWS), DOC can provide information on the current and predicted climatological and meteorological conditions at the scene of a significant spill incident. They can provide hydrometeorological observations and forecasts; satellite imagery; use of the NWS communications network and special-purpose aircraft. Site-specific forecasts are available to assist aircraft and ship operations or to provide real-time weather data for pollutant trajectory analyses. Weather Service Forecast Offices (WFSO) responsible for this region are located in: Juneau, Anchorage, and Fairbanks.

b. Through the National Environmental Satellite, Data, and Information Service (NESDIS), DOC can provide satellite imagery of coastal regions. Data buoys can be tracked through the use of the NIMBUS F Satellite. NESDIS can also provide climatological data on marine weather, oceanic conditions, and water column characteristics.

c. The National Marine Fisheries Service (NMFS), provides a broad variety of biological and oceanographic services which can address the impact of spill contaminants and cleanup operations on marine organisms and the marine ecosystem. Such services include population assessments to determine mortalities, laboratory facilities for specific contaminant impact at sublethal levels on marine organisms, and a nationally recognized group of marine pathologists. The regional office maintains extensive contacts with the commercial fishing industry, marine recreational interests, and state fisheries agencies. Chemists and toxicologists may be consulted on properties and toxic potential of various hydrocarbon contaminants to provide information on marine fisheries, marine mammals and certain endangered species to assist in identifying resources at risk and thus determine areas requiring priority protection. Regional personnel alert fishermen to oil slicks and other contamination hazards that may adversely affect fishing operations or equipment.

4. The Department of Defense (DOD) provides representatives from the U. S. Army, and U. S. Army Engineer District, Alaska to the RRT. Resources and assistance available from DOD agencies are outlined below.

a. The U. S. Army has various military facilities, vehicles, equipment, and, in some cases, aircraft which can be made available in the event of critical incidents. In addition, construction-related equipment may be locally available.

b. The U. S. Army Corps of Engineers (USACE) can provide expertise in all disciplines of engineering. USACE can also provide assistance in the area of dredging, surveying, supply vessels, and manpower. Their expertise can be used for clearing channels, locating obstructions, etc. Activation of USACE resources in support of an RRT activity would be in the form of a written mission assignment which outlines the parameters of work to be done and estimated dollar authority to accomplish the mission.

c. The U. S. Navy is the Federal agency most knowledgeable and experienced in ship salvage, shipboard damage control and diving. The USN has an extensive array of specialized equipment and personnel available for use in these areas as well as for open sea pollution incidents.

5. The Department of Energy (DOE), through its Radiological Assistance Program, provides assistance in recommending radiological control and protective measures. In addition, DOE coordinates Federal radiological assistance through the Federal Radiological Monitoring Assessment Program.

6. The Department of Health and Human Services (HHS).

a. HHS is responsible for providing direct on-scene or indirect assistance for chemical spills and emergencies in which there is a potential or actual threat to the public's health. Such assistance includes health related field guidance and laboratory support, access to toxicology data bases for health and medical data, biological sampling and testing and recommendations for environmental testing.

b. During an emergency response, the OSC may call upon the HHS representative to provide consultation and advice on whether potential or real threats to human health may exist. HHS response capabilities include but are not limited to:

(1) Reviewing available background information on the incident and estimating the potential for human exposure to hazardous substances on-site and to hazardous substances which may have migrated off-site via all pathways.

(2) While on-site, in order to determine if a threat to human health exists, recommending any additional environmental sampling or monitoring procedures needed to define extent of exposure, including identification of persons at high risk or particularly high exposure.

(3) Accessing computerized toxicological data bases through remote video and hard copy terminals maintained by the Center for Disease Control (CDC) and National Library of Medicine. The data base is an interactive data file containing chemical, physical, biological, pharmaceutical, toxicological, and environmental data on approximately 6,000 known and potential toxicants. This system supplements CHRIS and OHMTADS and is a useful source of information during an emergency response.

(4) Providing advice concerning evacuation or taking other preventive measures.

(5) Investigating possible toxic contamination of the food chain.

(6) Outlining potential pathways to human populations based upon soil kinetics/contamination, wind direction, aquifer contamination and/or food chain involvement.

(7) Obtaining and reviewing information regarding allegations of human illness associated with the incident.

(8) Investigating health complaints reported by on-site workers and nearby off-site residents.

(9) Conducting needed health studies which may include any one or a combination of methods, e.g., vital records reviews, review of medical records, administer surveys, conduct clinical examinations, test and analyze human specimens, conduct laboratory and hospital investigations, establish disease/exposure follow-up registries, etc.

(10) Reviewing plans for the safety and health of response workers, and providing advice about operations for compliance with appropriate OSHA regulations for worker safety and health.

(11) Coordinating appropriate health response with Federal, State and local health agencies and the private medical community.

(12) Providing advice and assistance as required by the OSC on health matters in community relations, and dealing with the media.

(13) Coordinating proficiency testing for laboratories analyzing human biological specimens.

7. The Department of the Interior (DOI) provides technical expertise with respect to geology, hydrology, minerals, fish, wildlife, history, and recreation as well as information on lands and resources specifically under its jurisdiction. Within the Department, individual bureaus have specific responsibilities and capabilities as follows:

a. The U. S. Fish and Wildlife Service (FWS) provides expertise on migratory birds, endangered and threatened species, and critical habitats, as well as information on national wildlife refuges and national fish hatcheries. It can resolve problems such as dispersal of birds, habitat identification, protection, damage assessment, and bird rehabilitation, including coordination of volunteers. Liaison with Audubon Society Chapters is maintained by the FWS and can be activated in response to spill incidents involving oiled and injured wildlife. FWS may be able to provide vehicles and boats locally for spill cleanup near national wildlife refuges.

b. The Minerals Management Service (MMS) has expertise in geology, geophysics, petroleum engineering, and oil spill modeling. It also has expertise and responsibility in well control and abatement of pollution sources from Outer Continental Shelf (OCS) oil and gas facilities. It can provide expertise in oil drilling, producing, handling, pipeline transportation, and information from the OCS Environmental Assessment Program. It has access to continuously manned facilities which can be used for command, control, and surveillance of spills occurring from operations conducted under the Outer Continental Shelf Lands Act. MMS can direct a lessee to clean up pollution resulting from its lease activities with their equipment or via direct contract under the authority of OCS Order No. 7 and 30 CFR 250.43. MMS may also coordinate helicopter transportation from a lessee operating in the area during emergencies. The MMS has the authority to suspend any activity within a 500 meter radius of any pollution source for abatement purposes as stated by the Memorandum of Understanding (MOU) of August 16, 1971 between the Departments of the Interior and Transportation. Through the MMS's Offshore Inspection Program, the MMS maintains a representative in each area of drilling activity who could act as the initial Federal observer for a pollution incident related to oil and gas operations. MMS has primary review and approval authority for oil-spill-contingency plans submitted under the Outer Continental Shelf Lands Act, as amended, and authority for regulating air quality which could result from in situ burning of oil spills on the OCS.

c. The National Park Service (NPS) can provide information on all national parks, monuments, and preserves in Alaska. NPS also provides expertise on historical, archaeological, architectural, recreational, and subsistence resources. NPS may be able to provide local logistical support, such as vehicles, aircraft, and boats for spill surveillance, damage assessment, or cleanup on or near national park lands.

d. The U. S. Geological Survey (USGS) can provide expertise on geologic, geohydrologic, and geochemical resources as well as ground and surface water properties.

e. The Bureau of Land Management (BLM) has responsibility for certain Federal lands and minerals. BLM may be able to provide local logistical support such as camps, vehicles, and aircraft for spill surveillance and damage assessment or cleanup on or near BLM managed land. BLM is responsible for providing the On-Scene Coordinator for Trans-Alaska Pipeline System spills on Federal lands.

8. The Department of Justice (DOJ), through the U. S. Attorney, provides legal advice concerning legal questions arising from discharges, releases, and Federal agency responses.

9. The Department of Labor (DOL), through the Occupational Safety and Health Administration (OSHA), provides advice, guidance, and assistance regarding hazards to persons involved in removal or control of oil or chemical spills.

10. The Department of State (DOS) will lead in developing joint international contingency plans. It will help to coordinate an international response when a pollution incident crosses international boundaries or involves foreign flag vessels. Additionally, DOS will coordinate requests for assistance from foreign governments and offer U. S. proposals for conducting research at incidents that occur off other countries.

11. The Department of Transportation (DOT).

a. On behalf of DOT, the U. S. Coast Guard provides the predesignated On-Scene Coordinators (OSCs) for the coastal zone and chairs the RRT when it is activated during a coastal zone response. The Coast Guard provides representatives to the RRT when activated for inland spills. In the coastal zone, the Coast Guard will ensure that the NCP is effectively and efficiently implemented with optimum coordination among Federal agencies and will recommend changes in the Plan as necessary. For an inland zone response, the Coast Guard provides technical expertise and resources relative to environmental protection and mitigation during periods of RRT activation. The Coast Guard offers expertise in marine environmental protection, port safety and security, marine law enforcement, ship navigation and construction, and the manning, operation and safety of vessels and marine facilities. For the purpose of planned RRT meetings, the Coast Guard will serve as Co-Chairman with the EPA.

b. The Coast Guard maintains facilities, vessels, aircraft and vehicles which can be used for command, control, and surveillance of pollution incidents occurring in coastal areas. The USCG also maintains special forces and teams including the staff of the National Response Center (NRC), the National Strike Force (NSF), the OSC Emergency Task Force (ETF), the Coast Guard District Staff Emergency Task Group (ETG), and the Public Information Assist Team (PIAT). See Section 308 for further discussion of these special forces.

12. The Environmental Protection Agency (EPA).

a. The EPA provides pre-designated On-Scene Coordinators for the inland zone and chairs the RRT during an inland spill response. EPA provides a representative to the RRT when activated for coastal spills. In the Inland zone, EPA will ensure that the NCP is effectively and efficiently implemented with optimum coordination among Federal agencies and will recommend changes in the Plan as necessary. During a coastal zone response, EPA provides technical expertise and resources relative to environmental protection and mitigation during periods of RRT activation. For the purpose of planned RRT meetings, EPA will serve as Co-Chairman with the Coast Guard.

b. The Alaska Operations Office, Anchorage (AOO), has no clean-up or containment equipment for use should an incident occur. In a major inland spill situation, manpower and equipment will be obtained from commercial contractors, state, Federal, military, industry, public municipalities and local contractors on an availability basis.

c. EPA resources available through the Alaska Operations Office are:

(1) Sample analysis performed by the Regional EPA laboratory, Seattle, Washington or at commercial laboratories in Alaska.

(2) Environmental effects monitoring and advice to the OSC on the use of chemical dispersants. EPA will coordinate scientific interests for on-scene research and provide lab facilities.

(3) Aerial photographic over flights for inland spills: EPA has pre-established arrangements for rapid acquisition of commercial aircraft for aerial photographic services and for rapid processing of the resultant film.

(4) Oil/Hazardous Substance disposal sites: The EPA Region X office maintains necessary liaison with state and local governments to assist the OSC in identifying suitable disposal sites for oil/hazardous substances recovered during a spill response.

(5) EPA maintains special forces to assist the OSC including the Environmental Response Team (ERT) based in Edison, New Jersey, and the Technical Assistance Team (TAT) available from Seattle, Washington. The Oil and Hazardous Materials Technical Assistance Data System (OHMTADS) is accessible by EPA. See section 307 of this plan for further discussion of these special forces.

13. The Federal Emergency Management Agency (FEMA).

a. FEMA monitors the status of pollution emergencies and would evaluate a request for a major disaster declaration if received from the Governor of Alaska pursuant to the Disaster Relief Act of 1974, as amended. If the President declares that a pollution emergency constitutes a major disaster, the Director of FEMA will coordinate and direct the Federal response.

b. FEMA is delegated responsibility under CERCLA and Executive Order 12316 for temporary housing and permanent relocation of residents, businesses and community facilities as a result of hazardous material incidents covered by CERCLA.

E. Role and Responsibilities of the State of Alaska.

1. The Governor of Alaska has designated the Alaska Department of Environmental Conservation as the state RRT representative. ADEC also represents and coordinates the RRT involvement of various other state, county, and municipal organizations.

2. ADEC provides the State On-Scene Coordinator (SOSC) and State Spill Response Team (SSRT) for oil or hazardous substances incidents in accordance with Alaska Oil and Hazardous Substances Pollution Contingency Plan as authorized by the Alaska Oil Pollution and Other Hazardous Substances Control Act.

3. ADEC has various functions, capabilities and resources both before and during a pollution incident. They include:

a. maintaining and making proper disbursements from the Oil Spill Expense Reserve.

b. maintaining a current listing of available containment and cleanup equipment, providing on-scene monitoring of all discharge cleanup activities for which ADEC is designated as the lead State Agency, coordinating technical expertise concerning the biological impact of a probable or existing discharge.

c. determining and approving the locations to be used as pollutant disposal sites.

d. pre-planning and concurring on the use of dispersants for the State of Alaska, along with EPA. (See Annex X concerning Dispersant Use.)

e. providing notification of a hazardous material incident to the appropriate State, local and Federal agencies.

f. providing a Public Information Officer, in coordination with Office of the Governor, and

g. arranging for emergency hazardous substance response with private contractors.

h. providing population data for all locations throughout the State of Alaska through the Alaska State Demographer: Dr. Greg Williams, (907)465-4500.

F. The planning and preparedness functions of the Regional Response Team are outlined below:

1. Maintain a continuing review of regional pollution emergency response operations and equipment readiness to insure adequacy of regional planning and coordination for combating discharges of oil and hazardous substances.

2. Develop procedures to promote the coordination of Federal, State and local governments, and industry groups and private agencies to respond to pollution incidents.

3. Provide information to the NRT on research requirements.

4. Maintain a readiness posture to respond to significant discharges of oil or other hazardous substances.

5. Recommend revisions of the National Plan to the NRT on the basis of observations of response operations.

G. The response and coordination functions of the RRT are outlined as follows:

1. Respond whenever the RRT is activated. The degree of response and therefore the extent of RRT activity will depend on the particular situation.

2. Monitor and evaluate reports generated by the OSC ensuring their completeness. Based on this evaluation, the RRT may recommend courses of action in combating a discharge.

3. Assist the OSC in acquiring and employing response resources from Federal, State, and Local governments and private agencies.

4. Coordinate all Federal public information activities with the OSC and act as the focal point for information transfer between the OSC and the NRT, so as to minimize or prevent dissemination of spurious or incomplete information. Public information actions are discussed in Annex VI of this plan.

5. Submit POLREPs to the NRT as determined necessary by the appropriate Co-chairman.

303. RRT Activation.

A. The RRT comprises members of many agencies who must, with no prior notice, be capable of responding to an incident and call out personnel and equipment from their agency in an expeditious manner. The key to successful response actions is prompt activation and implementation of this Plan. The appropriate RRT Co-Chairman will activate whenever one of the following situations exists:

1. A major or potential major discharge or release (activation is automatic);

2. Any pollution emergency when the OSC/RPM or any member of the RRT makes a request to the RRT Co-Chairman;

3. At any time when determined by either Co-Chairman.

B. The RRT may be activated by any means of communications, but will normally be done by telephone to the persons designated in Annex II of this Plan. The activation call will specify the time of RRT activation, the meeting place if assembly is planned, and as much about the incident and the requirements to be placed on the particular agency as are known. (A full membership activation will normally be called whenever a major incident occurs.) A limited membership activation may be called by either co-chairman, whenever it is apparent that the service of only selected members is needed.

C. The Co-Chairman will determine if assembly of the RRT is advantageous or whether telephone activation and electronic mail is sufficient to respond to the incident.

D. It is anticipated that lesser incidents for which a limited membership activation has been called will normally be handled by telephone or electronic mail. Activated members will operate from their home or business location and will coordinate their agency's on-scene staff tasks and RRT staff tasks from that point. The Regional Response Center (RRC) will be staffed by USCG or EPA personnel and a contact system will be maintained with each activated member. Members will call into the RRC whenever the member needs to discuss matters with the Co-chairman or whenever the member is about to make a change of location and telephone contact number.

E. Assembly of the RRT will normally occur whenever a major incident occurs; all members are activated; extensive briefings are necessary for members; or whenever a drill activation for training occurs. The assembly of the RRT will normally occur at the RRC or alternate RRC site indicated in section 304 below. Members should be prepared to operate from the RRC. Therefore, members are encouraged to provide all necessary contact lists, agency phone books, technical manuals, etc., necessary to implement the appropriate tasks assigned the agency. In prolonged RRT activations, it is anticipated that members will return to their homes or place of business after the RRT assembly briefing to continue their RRT tasks and attend future RRT meetings as prescribed by the Co-Chairman.

F. Deactivation of the RRT will occur after mutual agreement by the senior USCG and EPA members. Deactivation will normally be by telephone notification unless the RRT is assembled.

304. Regional Response Center.

A. The Regional Response Center is the regional coordinating site for notification, communication, and inter-agency coordination during a pollution incident. The primary Regional Response Center is located within the Operations Center of the Commander, Seventeenth Coast Guard District and is staffed around - the - clock. It may be contacted at (FTS) 759-7340 or (907) 586-7340. The alternate Regional Response Center is located in the EPA, Alaska Operations office at Anchorage, and is staffed on an as needed basis. It may be contacted at (907) 271-5083 or (206) 442-1263 after normal working hours.

B. Additional alternate sites for the Regional Response Center may be designated at the discretion of the appropriate Co-Chairman when needed.

305. RRT Communications.

A. RRT activation will normally be conducted by the appropriate RRT Co-Chairman by the most rapid means available, normally the telephone. Upon activation, RRT members will automatically begin receiving copies of all message traffic from the OSC to the Regional Response Center and from the Regional Response Center to the National Response Center.

B. Routine Communications will be performed by telephone and use of the electronic mail system (See Tab A of Annex V for a description of the E-mail system). General messages can be transmitted using the "Mail" function. Information concerning spill reports will be transmitted to RRT members, using the "RRT" function.

306. On-Scene Coordination.

A. As the single Federal official responsible for ensuring proper pollution response and enforcement, the OSC is the most important component in the national response organization. Federal on-scene coordination during a response is accomplished through the OSC, who provides reports to and receives advice from the RRT. The U.S. Coast Guard designates the OSC for discharges of oil or release of hazardous substances in the coastal zone; EPA designates the OSC for inland response operations dealing with discharges of oil or hazardous substance releases. If the incident involves a release from a chemical waste site, EPA will provide the OSC. DOD will furnish the OSC for hazardous substance releases from DOD facilities or vessels.

The OSC/RPM directs Federal Fund-financed response efforts and coordinates all other Federal efforts at the scene of a release or discharge. Should the circumstances indicate, the OSC/RPM can request support from special forces with expertise in containment and cleanup, environmental protection, and public affairs. The OSC/RPM:

- a. shall collect pertinent facts about the discharge or release such as its source; potentially responsible party; nature, amount, and location of the material; and potential impact upon the environment and human health, welfare and safety;
- b. shall promptly advise the appropriate State agency;
- c. should notify the affected land managing agency and trustees of natural resources, as promptly as possible;
- d. shall address worker health and safety at the response scene;
- e. shall direct response operations as described in Subparts E and F of the NCP;
- f. should consult regularly with the incident-specific RRT when it has been activated;
- g. shall evaluate incoming information and immediately advise FEMA of potential major disaster situations and the HHS representative when a possible public health emergency exists;
- h. should consult with DOI and DOC/NOAA representatives if a discharge or release may adversely affect any endangered or threatened species, or result in destruction or adverse modification of the habitat of such species;

GAO

United States General Accounting Office
Report to Congressional Requesters

October 1989

COAST GUARD

Adequacy of Preparation and Response to Exxon Valdez Oil Spill



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Major Contributors to This Report		

Exxon Valdez Oil Spill Provides Lessons for Future Response Preparations and Oil Spill Prevention

Shortly after midnight on March 24, 1989, the oil tanker Exxon Valdez ran aground on Bligh Reef in Prince William Sound, Alaska, spilling more than 10 million gallons of Alaska's North Slope crude oil. We believe the problems arising from the response to this largest oil spill in U.S. history provide lessons for the nation to apply to large oil spills in coastal waters throughout the country. The inability of industry and government to effectively respond to such a large spill demonstrates the need for improvements in the nation's spill prevention and response capabilities and the need for adequate funding to support these efforts. We believe these demonstrated needs highlight three areas warranting Congressional consideration.

- First, the response to the Exxon Valdez oil spill was clearly inadequate. Major problems were encountered because no one had realistically prepared to deal with a spill of this magnitude in Prince William Sound. Further, we may be similarly unprepared elsewhere in the nation. One important reason for this state of national unpreparedness is that there is no single designated leader or authority to ensure that preparations are adequate. We believe the federal government should perform this leadership role.
- Second, even with a substantially greater commitment of resources to improve response capabilities, the nation's ability to deal with a spill of the Exxon Valdez magnitude is limited at best. Thus, the nation's priority for dealing with such spills should be to prevent them from occurring in the first place. The experience at Valdez and elsewhere has shown that much needs to be done to improve our prevention measures.
- Third, the nation's reaction to the Exxon Valdez and other recent spills seems to indicate a strong desire to reduce the risks associated with oil spills. While the many recommendations surfacing as a result of the recent incidents provide good options for changing the nation's level of protection, a leadership role is needed to determine the best course of action for improving prevention and response capabilities. Further, it will be necessary to consider various options to significantly increase funding if the nation's levels of protection are, in fact, to be raised.

Background

The Clean Water Act requires the President to develop a national contingency plan to provide efficient, coordinated, and effective action for minimizing damage from oil spills and hazardous substance discharges.¹

¹The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 requires a national contingency plan to include a section for response to hazardous substance releases into the environment that may present an imminent and substantial danger to the public health and welfare.

Appendix I
Exxon Valdez Oil Spill Provides Lessons for
Future Response Preparations and Oil
Spill Prevention

The Clean Water Act addresses the requirements for such discharges into or upon the navigable waters of the United States and the adjoining shorelines. The first national contingency plan was adopted in 1968, and the current plan appears as 40 C.F.R. part 300. The national plan provides for the following national response system organization:

- A national response team responsible for oil spill and hazardous substance release response planning and coordination. As presently constituted, this team is composed of representatives from 14 federal agencies.
- A national response center, which serves as a focal point for reporting spills. The center maintains a listing of available containment and cleanup equipment.
- Regional response teams, which provide planning and preparedness activities before, and coordination and advice during, response actions related to oil discharges and hazardous substance releases. There currently are 13 such teams.
- Regional contingency plans that are developed by the regional teams to provide coordination of a timely, effective response. To the greatest extent possible, these plans are to be coordinated with state and local federal plans for the same potential spill areas.
- Federal local contingency plans that are developed by predesignated federal officials called on-scene coordinators in consultation with the regional team, to identify (1) probable locations of discharges or releases, (2) available resources, (3) disposal methods and facilities consistent with local and state plans, and (4) a local structure for responding to discharges or releases.

Together these mechanisms constitute the national response system. As can be seen from the description of its components, the system's success depends on the combined efforts of all agencies and organizations working together at the national, regional, state, and local levels.

The Coast Guard is to provide on-scene coordinators for the coastal zone and the Environmental Protection Agency is to provide coordinators for the inland zone. The boundaries between coastal and inland zones are determined by agreement of the two agencies and the boundaries are designated in the regional plans. The Coast Guard's on-scene coordinators are responsible for ensuring proper pollution response and enforcement. They are required to use appropriate legislative and regulatory authorities, the national contingency plan, regional and local contingency plans, and actions relevant to the unique circumstances of the

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Exxon Valdez Oil Spill Provides Lessons for
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incident to ensure that the response is carried out expeditiously and aggressively.

Except under certain conditions, the owner or operator of a vessel that discharges oil in violation of the Clean Water Act is liable for removal costs up to a statutorily established ceiling. The on-scene coordinator monitors the removal operation to ensure it is being done properly. When appropriate, the on-scene coordinator should guide the discharger on the preferred course of action. However, whenever a polluter is unknown or not acting responsibly, or when its removal effort is insufficient, the coordinator may assume total or partial control of response activities. This is done by "federalizing" the spill, activating a fund provided under the act to cover expenses, and taking whatever actions are necessary to ensure proper cleanup.

Improvements Needed in Response Preparations and Capabilities

The general consensus is that the initial response to the Exxon Valdez spill was inadequate to control and recover the spilled oil. Problems identified ranged from a shortage of equipment and skilled personnel to inadequate communications and organizational structures. We believe a number of conclusions can be reached from this experience related to the inadequacy of response preparations, the lack of a clear leadership role or authority for ensuring adequate preparations, the limited capabilities of response equipment under certain conditions, and the funding and procurement restrictions the federal government may face in responding to a major spill.

Improvements Needed in Planning and Resource Readiness

The government and industry clearly were not prepared from a planning, resource, or readiness perspective to deal with a spill of the Exxon Valdez magnitude. While federal, state, and industry contingency plans existed for dealing with an oil spill in Prince William Sound, the primary plan for direct spill cleanup was prepared by the pipeline terminal operator—Alyeska Pipeline Service Company (Alyeska). Alyeska officials said that under their plan, the company had equipment and personnel assembled only for what it considered would be the "most likely" spill—an estimated 42,000 to 84,000 gallons. This figure was less than 1 percent of the more than 10 million gallons that spilled from the Exxon Valdez. Alyeska's plan included a scenario for how it would respond to a spill of about 8.4 million gallons. Its officials told us that this planned response was based on how Alyeska would use its existing equipment and personnel supplemented by outside resources. They also said this

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response would be inadequate to prevent limited environmental damages if such a very large spill were to occur. The 8.4-million-gallon scenario also indicated that using dispersants on the oil and burning it would be important in responding to a spill of this size and that long-term beach cleanup would be expected.

Along with having a response plan that was inadequate for a spill of the Exxon Valdez magnitude, field exercises had not been conducted, according to Alyeska and Coast Guard officials, to test the ability of resources and personnel to realistically respond to a major spill in Prince William Sound. According to an Alyeska official, Alyeska originally had a dedicated team of contractor personnel ready to respond to a spill. But in 1981 the team was disbanded, and responsibility for responding to spills was assigned to Alyeska personnel as an additional duty. In addition, at the time of the Exxon Valdez incident, Alyeska's response barge was undergoing repairs and was not loaded with needed equipment. Given this preparation, it is not surprising that major problems have been identified with the initial response to the Exxon Valdez spill.

The Exxon Valdez and other recent spills have heightened concern about whether the nation is adequately prepared for major oil spills elsewhere. For example, in the Delaware Bay area, we found that preparations are based on what is considered a likely or typical spill—generally up to 250,000 gallons. In a recent 307,000-gallon spill in that area, the response contractors could not initially obtain enough equipment or personnel to effectively contain the spill, and the Coast Guard had no available alternatives. Ultimately, the Delaware National Guard was called to assist in the cleanup. Furthermore, coordination, communication, and organization problems were apparent during the response.

On a broader scale, the American Petroleum Institute acknowledged in a June 1989 report that the oil industry lacks the equipment and personnel to deal with a spill of 9 million gallons or more anywhere in the coastal United States. Because of the President's concern about the nation's ability to respond to major spills, the Coast Guard initiated a nationwide study of contingency plans.

As this country moves forward in planning for higher levels of response capability, two questions emerge. First, what size spill should the nation be prepared to respond to? And, second, what criteria should be used to judge the adequacy of the response? These questions are important

because the nation seems to lack the ability to prevent major spills from causing environmental damage.

Leadership Authority Needs to Be Clarified

Improving this country's ability to respond to major oil spills will also require strengthening the federal leadership role in ensuring that preparations are adequate. That Alyeska had a spill response plan for Prince William Sound—albeit an inadequate one for the size of spill that occurred—appears atypical of the nation's situation. According to the Coast Guard, Alaska required Alyeska to have a plan for tankers transiting the area, but other states often leave such planning to be done by industry on a voluntary basis.

From the federal perspective, the Coast Guard believes it lacks authority to require private shippers or terminal operators, like Exxon or Alyeska, to have contingency plans for dealing with oil spills for vessels in transit. Furthermore, if the shipper or terminal operator has such a plan, the Coast Guard believes it cannot dictate the size of spill that the plan should address, ensure that the resources called for in the plan are in place, or ensure that the plans are tested for their effectiveness. Once a coastal oil spill occurs, however, the Coast Guard asserts that it has authority to (1) monitor the response or (2) assume partial or total control of the response by "federalizing" it. Thus, while the Coast Guard has played a major role in ensuring the effectiveness of a response, it believes it does not have the necessary authority to ensure that response preparations are adequate. Coast Guard officials believe this lack of authority is the most significant limiting factor in the contingency planning process.

According to the Coast Guard, state involvement in ensuring adequate preparations varies; therefore, we believe the federal government should be the leader for ensuring that adequate plans and resources are in place to respond to major spills and that such resources are properly tested to ensure a smooth response. This responsibility could be delegated to states that demonstrate an ability to effectively carry out this role.

Improvements Needed in Response Technology

Responses to the Exxon Valdez and other recent spills also indicate a need to improve technical capabilities for containing and recovering oil in varying environments. For example, according to Coast Guard officials, during the Exxon Valdez spill response, skimmers frequently

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broke down or were ineffective in dealing with oil that had become thick from weathering. At other times, high winds and seas prevented any recovery. Furthermore, the response techniques of dispersing or burning the oil, which Alyeska considered important in responding to a major spill, are controversial because of their potential environmental impact. Additionally, the effectiveness of these two techniques is highly dependent on the timeliness of their use and on weather and water conditions. A lesson learned in the recent Delaware River spill was that existing equipment normally used to contain and cleanup spills such as booms and skimmers could not effectively recover the type of oil that had been spilled. The only effective technique was to physically pick up the oil and place it in containers.

A consensus appears to be developing that considerable research and development is needed to improve spill response technology. In its June 1989 report, the American Petroleum Institute stated, "A realistic appraisal of U.S. and, in fact, worldwide response to major spills will recognize that no effective containment of such a spill has been accomplished." In addition, the cover letter to a May 1989 Department of Transportation and Environmental Protection Agency report to the President stated, "Oil spill cleanup procedures and technologies are primitive." Coast Guard officials told us that with current technology the best that can typically be expected after a major spill is to recover 10 to 15 percent of the oil.

Notably, however, while concern exists that response technology has not changed much since the 1970s, federal funding for research and development has been cut back in recent years. For example, an official of the Environmental Protection Agency stated that in fiscal year 1988 the agency suspended research and development in prevention and cleanup of oil spills in favor of higher priority topics. Also, in fiscal year 1988 the Coast Guard's budget for research, development, testing, and evaluation in its Marine Environmental Protection Program, of which oil spill response is only a part, was \$1.6 million—\$7.2 million less than had been expended in 1983.

**Greater Funding and
Procurement Flexibility
May Be Needed**

An important question emerging from the Exxon Valdez spill is whether the federal government would have the funds and flexibility to effectively respond to a spill of this magnitude. Had the Coast Guard been dissatisfied with industry's efforts and assumed responsibility for carrying out the response, it would have had to rely on the Clean Water Act

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"311(k)" fund to pay for the costs. Although this fund is authorized at \$35 million, it had only \$6.7 million available when the spill occurred—enough to finance less than one week of response operations. In addition, the Coast Guard said it could also face problems in getting reimbursed for all of its costs because of the low liability limits established in federal legislation enacted in the 1970s for those causing spills. Furthermore, Coast Guard officials pointed out that because the government's procedures for contracting and procurement are much more cumbersome than private industry's, Exxon was able to obtain needed resources from around the world more quickly and efficiently than the government could have.

Priority Should Be Given to Preventing Spills

A greater commitment to response alone, even if substantial, will probably not fully protect the environment because the nation's ability to deal with major spills, from the perspective of both preparation and technology, is limited at best. According to an expert in oil spill recovery who assisted us in our evaluation, even if all the equipment available in August 1989 to combat any future spills in Prince William Sound had been available at the time of the Exxon Valdez spill, and even if conditions for deploying all of the equipment were ideal, only 35-45 percent of the oil could have been recovered. Therefore, we believe priority should be given to preventing spills in the first place. However, the experience at Valdez and elsewhere shows that the nation's prevention measures need to be improved, partly because past decisions on what should be done were based on the availability of funds and partly because of the inconsistencies in the use of these measures in different locales.

Although preventing spills will require up-front costs, these expenditures could well be less in the long run and more effective than the cost of containing oil spills and mitigating their environmental impact. For example, federal agency costs associated with the Exxon Valdez spill could be about \$120 million by the end of fiscal year 1989. Exxon has recently stated that it has reserved \$880 million for spill-related costs through mid-September 1989. It is important to note, however, that these costs do not include future industry and government cleanup costs or long-term restoration costs, which could be significant. Nor do these costs reflect the environmental impact on the wildlife, shores, and livelihoods of the people in the area.

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Methods for preventing oil spills include monitoring and directing ship movements and using harbor pilot or tug escort assistance. Although these methods were used in Prince William Sound, their use had been limited.

The Coast Guard administers a Vessel Traffic Service System in Prince William Sound and in four other areas of the nation's waterways to guard against vessel groundings or collisions. Although, according to the Coast Guard, this system is often considered analogous to the nation's air traffic control system, there are important differences. First, the Coast Guard advises ships of their position relative to other ships and navigational hazards, but generally it does not direct their specific movements, since the vessel's crew are considered in a better position to know what maneuvers are appropriate given existing weather and water conditions. Second, the current radar-based system is not as effective in identifying precise vessel locations as are other technologies, such as a satellite navigation-based system. And third, while participation in the Prince William Sound system is mandatory, participation in the system at two other locations is voluntary, meaning that the ships do not have to notify the Coast Guard of their movements.

When the Exxon Valdez ran aground, according to the Coast Guard, there was no radar monitoring of the ship when it left the shipping lanes because it had reportedly passed the limits of reliable radar coverage for the Vessel Traffic Service System. At the time of the incident, the system covered less than half of the vessel's transit from Valdez through Prince William Sound. Although consideration was given to providing system coverage throughout the sound when the Alaska pipeline was being built, this consideration was rejected in part as too costly. The number of the vessel traffic systems in other parts of the country have also been cut back for budgetary reasons.

Tugs and harbor pilots can help lower the risks of accidents by assisting vessels and by providing them with more knowledge of local water conditions and hazards. According to the Coast Guard, at the time of the incident the use of tugs was limited to escorting tankers through the Valdez Narrows. Further, although Alaska initially required tankers to have a harbor pilot on board throughout Prince William Sound, the requirement was later scaled back because of the danger involved in having harbor pilots transfer between vessels in the frequently high seas at the sound's entrance.

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Our reviews at other locations show differences in the use of harbor pilots and tug escorts, largely due to federal and state requirements in local areas. For example, in Delaware and Pennsylvania, although harbor pilots remain on board vessels from the time they enter the Delaware Bay until they are docked, the states have different licensing requirements. Further, the Coast Guard requires vessels transporting liquified petroleum gas in the bay to have tug escorts but does not require oil tankers to use tug escorts.

Limitations in other prevention mechanisms have come to light since the Exxon Valdez spill. At the National Transportation Safety Board hearings, allegations of improper conduct and inadequate training of certain members of the Exxon Valdez crew have raised questions about the effectiveness of Coast Guard licensing and of industry training procedures. Similarly, because allegations have arisen that equipment inadequacies contributed to recent spills elsewhere, questions have been raised about whether improvements are needed in ship design, such as the need for double bottom construction or additional maneuvering mechanisms. Also, the aging of the tanker fleet and the impact that crossing high seas has on vessels has heightened the concern over the need for frequent, thorough inspections.

While cutbacks or limitations on prevention measures in Prince William Sound largely reflected funding or safety concerns, prevention measures prior to the spill seemed acceptable to the Coast Guard and others because nothing major had gone wrong in the 12 years since the pipeline began operations. For example, according to the Coast Guard, since the pipeline opened in 1977, about 8,700 oil tankers have safely transited the sound with only minor or manageable spills occurring. Now, since the Exxon Valdez spill, concerns have been raised that prevention systems should be expanded with some degree of redundancy built into them. This accident may have been prevented if the tug had continued to escort the vessel, or the harbor pilot had stayed on board, or the vessel-tracking system had been capable of monitoring the ship beyond the site of the accident.

Where Do We Go From Here?

The reaction to the Exxon Valdez and other recent spills seems to be that the nation must lower the risks of transporting oil by tankers by improving its prevention of and response to spills. Since the Exxon Valdez spill, the government and industry have done much to improve their prevention and response capabilities in Prince William Sound. The

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spill has also stimulated numerous assessments of the lessons learned with nationwide implications. The multitude of options that are surfacing for preventing and responding more effectively to oil spills are a positive sign of the nation's desire to act boldly and quickly. However, as the nation decides on the best course of action, it will be important to avoid a scattershot approach that leaves it little better than it was before.

Spill Has Generated Many
Recommendations for
Improving Prevention and
Response

The Exxon Valdez spill has generated many recommendations for improving prevention and response in Prince William Sound as well as throughout the nation. For example, under direction from the state of Alaska, Alyeska has taken several steps to ensure that equipment and personnel can respond quickly to spills. Alaska has also required escort vessels and harbor pilots to stay with tankers past the site of the grounding. The Coast Guard has told us they have made several procedural changes to strengthen the Vessel Traffic Service System's ability to monitor ship traffic.

From a national perspective, the Department of Transportation and the Environmental Protection Agency's joint report to the President identified many nationwide efforts needed in prevention, contingency planning, readiness of response resources, roles and responsibilities of parties involved in a response, and research and development. Similarly, the American Petroleum Institute report included specific recommendations for improvements in prevention, response, and research and development. In addition, the Coast Guard recently completed a comprehensive evaluation of alternatives for preventing oil spills.

Many other activities are still under way that will add to possible nationwide actions. The Coast Guard has a number of navigation initiatives underway such as a study of the Vessel Traffic Service System, including the number of new locations needed, the need to expand the scope of coverage at existing locations, and opportunities for using new technologies. Other recommendations on prevention are likely to stem from reports from National Transportation Safety Board and Coast Guard investigations of the causes of the Exxon Valdez accident.

On the response side, the Coast Guard's nationwide study of spill response plans and readiness, coupled with the President's report, are being used by the Coast Guard to recommend a new national policy on

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preparedness for oil spills. Also, the state of Alaska has created a commission to investigate the Valdez incident that will, among other things, recommend changes by government and industry that may be needed in both prevention and response.

Finally, in addition to the various industry and government studies and actions, many hearings have been held by different committees of the Congress on various issues related to the Exxon Valdez spill and oil spills in general. Legislation has been introduced regarding contingency planning, oil pollution and liability compensation, mariner licensing requirements, as well as other issues.

Need for Focused Action and Greater Funding

Although the many recommendations are positive signs, unless the approach to improving the nation's level of protection is unified, these actions may not be as effective as intended, or may conflict with one another.

To the end, we believe it would be appropriate to establish a single entity or leader for recommending the specific actions that are likely to achieve a higher level of protection. This entity would sort through recommendations of current and forthcoming studies; establish priorities; and recommend to the Congress, the Administration, states, and others, the levels of prevention and response the nation should strive for and the steps necessary to achieve them.

There are alternatives for designating this single entity or leadership role. For example, a federal agency, such as the Coast Guard, could fill this role. Another approach could be to establish a task force or commission comprised of representatives from organizations that play key roles in spill prevention and response. These could include industry, federal agencies, states, and other groups. Each approach has advantages and disadvantages. For example, a commission approach may be less timely than using a federal agency. On the other hand, the recommendations of a federal agency working alone could be influenced by its own priorities among its various missions. If a federal agency is selected as the single entity, we believe it would be important to develop a mechanism for participation by other key organizations.

As a strategy is developed for improving oil spill prevention and response capabilities, it may be advantageous to consider at the same time the risks associated with the water transportation of other types of

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hazardous cargo. Over the past 20 years, there has been an average of 80 accidents a year involving the approximately 900 tankers that transport other types of hazardous cargo, such as liquified petroleum gas. An average of six of these each year resulted in the release of hazardous cargo into the water. While the number of accidents involving hazardous cargo tankers is small compared to the number of accidents involving oil tankers, the accident rate is proportionally about the same given the total number of tankers involved. We believe, therefore, that as an action plan is developed for increasing levels of prevention and response for oil spills, planners should also consider what should be done about transporting other hazardous cargos.

Clearly, achieving greater protection will require greater funding. We believe consideration should be given to establishing a fund, or modifying existing funds, to finance the improvements in the levels of both prevention and response, including any needed research and development. Several funding sources can be considered. Options that have already surfaced since the Exxon Valdez spill would include direct industry funding, user fees (a per-barrel tax on oil), direct appropriations, or a combination of these three.

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STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

IN THE MATTER OF)
ALYESKA PIPELINE SERVICE COMPANY)
OIL SPILL CONTINGENCY PLAN)
Respondent)
_____)

EMERGENCY ORDER

Pursuant to AS 46.03.820, which authorizes the Department of Environmental Conservation to issue orders to prevent and abate pollution of the environment on an emergency basis, and based upon an investigation conducted by the Department of Environmental Conservation, I find and order as follows:

FINDINGS

1. Alyeska Pipeline Service Company ("Alyeska") has in place, pursuant to AS 46.04.030, an oil spill contingency plan ("plan") which prescribes Alyeska's response to an oil spill from Alyeska's Marine Terminal or a tanker calling on the terminal.

2. On March 24, 1989, the T/V Exxon Valdez ran aground on Bligh Island after taking on approximately 53,094,510 gallons (1,264,155 barrels) of crude oil from Alyeska's Marine Terminal.

3. The T/V Exxon Valdez discharged approximately 10,000,000 gallons (240,000 barrels) of crude oil following the grounding.

4. Alyeska is responsible under the plan for immediate implementation of the plan and is obligated under the plan to, inter alia,:

a. initiate reconnaissance actions to determine the exact location and extent of the spill;

b. initiate control actions to minimize the spread of oil and to prevent oil from reaching sensitive areas;

c. initiate cleanup actions for recovery of oil in conjunction with containment action as required.

5. Specifically, the plan provides for an oil spill response for a scenario of a 200,000 barrel spill in Prince William Sound. Under that scenario, Alyeska is obligated to, inter alia,:

a. move containment booms, skimmers, response equipment, support equipment and personnel (including private contractors) to the site within 1 to 5 hours;

b. deploy the closest empty or light loaded tanker to the spill site;

c. boom off the leaking vessel to contain the spilled oil;

d. undertake exclusion actions to prevent spilled oil from contaminating designated sensitive areas; and

e. immediately begin recovery of oil.

6. Alyeska did not fully boom off the the Exxon Valdez until more than 72 hours following the grounding and long after the vast majority of the oil had been discharged from the vessel.

7. The time period Alyeska took to deploy the plan's designated equipment far exceeded the operational schedule set out in the plan and Alyeska undertook no effective containment or cleanup of the oil.

8. Alyeska undertook no exclusion actions to prevent spilled oil from approaching communities or sensitive areas.

9. As of April 4, 1989, only approximately 9000 barrels had been recovered. Also, the area of the spill's impact exceeded 1640 square miles. This spill fouls hundreds of miles of shoreline. It severely impacts water quality, fisheries resources, waterfowl and marine mammals.

10. Alyeska is under a mandatory and continuing legal obligation to contain and cleanup the existing Valdez spill. Alyeska's inadequate response to the spill under the plan to date demonstrates its inability to respond as required under the plan to any new oil spills.

11. Continued operation of Alyeska's Marine Terminal and tanker traffic at the current crude oil flow rate creates a substantial potential risk of an additional oil spill at Alyeska's Marine Terminal or in Prince William Sound.

12. If an oil spill occurs, it will result in or is likely to result in irreversible or irreparable damage to the natural resources or environment and will result in or is likely to result in an imminent or present danger to the health or welfare of the people of the state.

13. Alyeska has demonstrated an inability to respond as required under its plan. Therefore, it is necessary to add supplemental procedures to the plan. A Notice of Modification of Alyeska's oil spill contingency plan has been ordered by the Department of Environmental Conservation. It would be prejudicial to the interests of the people of the State of Alaska to

delay action on the Notice of Modification until an opportunity for a hearing can be provided because of the substantial threat of a catastrophic oil spill for which there is not an adequate response capability in place. Therefore, an Emergency Order under AS 46.03.820 is appropriate.

14. Furthermore, the Governor of the State of Alaska has declared the Valdez oil spill an emergency under AS 26.23. AS 26.23.020(b) and AS 26.23.020(g) authorize the Governor of the State of Alaska to issue orders to control ingress to and egress from an emergency site to achieve the purposes enunciated in AS 26.23.010 (1) and (7).

ORDER

Based upon the foregoing findings, I order as follows:

1. Alyeska must have in place the complete core inventory of all terminal contingency plan equipment for the Marine Terminal described on pages 9-133 and 9-134 of the plan, within 72 hours from receipt of this Notice. Alyeska must identify to DEC in writing, within 72 hours of this notice, the storage locations of all core contingency plan equipment. Thereafter, Alyeska may not use core contingency plan equipment in any operation except oil spill response and training;

2. Alyeska must designate a round-the-clock oil spill response crew of a minimum of 12, plus crew supervisors, located at the terminal, which crews and supervisors shall be immediately available and have as their sole responsibility oil spill response. The terminal response crew is in addition to the manpower required in paragraph 8.e. below. The minimum terminal

crew may be augmented by additional crew at the terminal or at other locations to enhance oil spill response capability.

Alyeska must identify to DEC in writing, within 72 hours of this notice, the designated shift supervisors and, within 7 days from this notice, the shift crews. Alyeska must, thereafter, notify DEC in writing within twenty-four hours of any crew or supervisor changes.

3. Alyeska must boom all tankers upon arrival. Alyeska must inspect boomed areas hourly for spills; Alyeska must inspect for the presence of oil in all boomed areas prior to the tanker deberthing;

4. Alyeska must deberth tankers only during daylight (dawn to twilight) hours until it complies with paragraphs 1 and 2 above;

5. Alyeska must load only one tanker at a time until it complies with paragraphs 1 and 2 above;

6. Alyeska must ensure that two tugs accompany all outgoing tankers to Hinchinbrook Entrance southeast of Seal Rocks;

7. Alyeska must ensure that a pilot be aboard an accompanying tug or on all outbound tankers to Hinchinbrook Entrance.

8. Alyeska must acquire and have in operation as soon as possible but no later than May 15, 1989, the best available equipment and technology and the capability to respond to, and arrive on-scene within two hours of notification, a 10,000,000 gallon oil spill or a distressed tanker between the Hinchinbrook Entrance and Potato Point. Response capability at the scene shall include but is not limited to:

a. thirty-thousand feet of heavy duty, deep skirted, rough water, seagoing boom which is capable of withstanding and performing in a 3 meter sea state;

b. immediate deployment and management of the boom so as to contain spilled oil and prevent it from impacting shoreline;

c. recovery equipment capable of removing oil from the water at a rate of not less than 10,000 barrels per hour;

d. pumping, transfer, and lightering equipment, and storage capacity and ancillary storage transfer equipment, adequate to receive, transfer, and store recovered oil at a rate of not less than 10,000 barrels per hour without impeding the necessary recovery rate;

e. pumping, transfer, and lightering equipment, and storage capacity, adequate to remove and store all oil from a distressed tanker at a rate of not less than 10,000 barrels per hour without impeding the necessary recovery rate; and

f. sufficient vessels, manpower, equipment and appurtenances adequate to accomplish all of the above.

9.a. Alyeska's Valdez Marine Terminal operations center must maintain direct radio contact with the bridge of each incoming and outgoing tanker, accompanying tugs, and Alyeska's oil spill response vessels while an incoming or outgoing tanker is located at any point between the terminal and Seal Rocks at the Hinchinbrook Entrance. Alyeska must record all radio transmissions and preserve each recording for a period of at least 30 days, unless Alyeska receives a notice under paragraph 9.b.

below, in which case Alyeska shall immediately transmit the original of the recording(s) to DEC's Valdez District Office.

b. Alyeska must require each tanker, accompanying tugs, and Alyeska's oil spill response vessels to notify Alyeska immediately by radio transmission if an incident occurs or there is any irregularity or indication of a problem which threatens or may threaten the tanker or its cargo (including ballast water). Specifically, notice is required if the tanker leaves both of the U.S. Coast Guard designated Prince William Sound and Valdez Arm traffic lanes (except when an outbound tanker leaves the lanes at their Hinchinbrook Entrance terminus).

c. As soon as Alyeska receives a notice under this paragraph, it must alert all its oil spill response teams and initiate all actions needed for an immediate response. Alyeska must also immediately provide oral notice to the Department of Environmental Conservation Valdez District Office Supervisor. The two hour time period during which Alyeska must respond to a tanker oil spill will begin upon its receipt of any notice under this paragraph.

10. Alyeska must prepare, by no later than June 1, 1989, an application for approval for a revised oil spill contingency plan which incorporates the modification terms and conditions in paragraphs 1, 2, 3, 6, 7, 8 and 9 above and which adds supplemental and enhanced oil spill response capability.

11. In the event Alyeska is unable to comply with the deadline in paragraph 8, it shall notify DEC in writing within 7

days of this Order and describe in detail the compelling reason why the deadline cannot be achieved. Submitting a notice under this paragraph does not stay the operation of this Order unless the Order is modified in writing by the Department of Environmental Conservation.

PROCEDURES

Respondent has the right to present evidence or request a hearing to review this Order at any time within 15 days of service. The department may schedule a hearing at the earliest possible time of such a request is made pursuant to AS 46.03.820(b) and (c).

Any request for hearing or submission of evidence should be made by delivery of the enclosed Notice of Defense to the Department of Environmental Conservation, P.O. Box 0, Juneau, Alaska 99811-1800. Failure to request a hearing or submit evidence within the time period specified constitutes a waiver of respondent's right to review this Order.

The submission of an application or the scheduling of hearing does not stay the operation of this Order.

PENALTIES

Any person who violates this Order is subject to criminal prosecution under AS 46.03.790. Additionally, the person is liable in a civil action under AS 46.03'760 for a sum of not less than \$500 nor more than \$100,000 for the initial violation and not more than \$5,000 each day thereafter that the violation continues. Penalties beyond the minimum amount are computed on

the basis of liquidated damages, reasonable administrative costs incurred by the department, and the economic savings realized by the respondent.

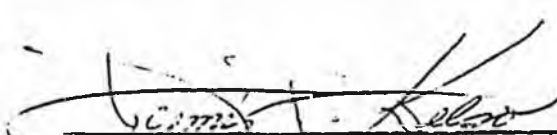
AS 46.03.820(d) authorizes the Attorney General to seek enforcement of this Order if respondent fails to immediately comply with its provisions.

Additionally, if respondent disobeys or resists the terms of this Order, the department may, under the authority of AS 44.62.590, petition the Superior Court for an order directing respondent to show cause why it should not be held in contempt of court. If respondent is adjudged in contempt, respondent may, under the terms of AS 09.50.050, be imprisoned until such time as the terms of the Order are met.

This Order does not constitute a waiver by the Department of Environmental Conservation of the provisions of any other state law or regulation and the Department of Environmental Conservation reserves all lawful remedies in equity, by statute, or the common law.

Dated April 7, 1989

DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Dennis D. Kelso, Commissioner Alaska
Department of Environmental Conservation

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

IN THE MATTER OF)
ALYESKA PIPELINE SERVICE COMPANY)
OIL SPILL CONTINGENCY PLAN)
Respondent)

MODIFIED
EMERGENCY ORDER

Pursuant to AS 46.03.820, which authorizes the Department of Environmental Conservation to issue orders to prevent and abate pollution of the environment on an emergency basis, and based upon an investigation conducted by the Department of Environmental Conservation, I find and order as follows:

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2. On March 24, 1989, the T/V Exxon Valdez ran aground on Bligh Island after taking on approximately 53,094,510 gallons (1,264,155 barrels) of crude oil from Alyeska's Marine Terminal.

3. The T/V Exxon Valdez discharged approximately 10,000,000 gallons (240,000 barrels) of crude oil following the grounding.

4. Alyeska is responsible under the plan for immediate implementation of the plan and is obligated under the plan to, inter alia,

a. initiate reconnaissance actions to determine the exact location and extent of the spill;

b. initiate control actions to minimize the spread of oil and to prevent oil from reaching sensitive areas;

c. initiate cleanup actions for recovery of oil in conjunction with containment action as require

5. Specifically, the plan provides for an oil spill response for a scenario of a 200,000 barrel spill in Prince William Sound. Under that scenario, Alyeska is obligated to, inter alia,:

a. move containment booms, skimmers, response equipment, support equipment and personnel (including private contractors) to the site within 1 to 5 hours;

b. deploy the closest empty or light loaded tanker to the spill site;

c. boom off the leaking vessel to contain the spilled oil;

d. undertake exclusion actions to prevent spilled oil from contaminating designated sensitive areas; and

e. immediately begin recovery of oil.

6. Alyeska did not fully boom off the the Exxon Valdez until more than 72 hours following the grounding and long after the vast majority of the oil had been discharged from the vessel.

7. The time period Alyeska took to deploy the plan's designated equipment far exceeded the operational schedule set out in the plan and Alyeska undertook no effective containment or cleanup of the oil.

8. Alyeska undertook no exclusion actions to prevent spilled oil from approaching communities or sensitive areas.

9. As of April 4, 1989, only approximately 9000 barrels had been recovered. Also, the area of the spill's impact exceeded 1640 square miles. This spill fouls hundreds of miles of shoreline. It severely impacts water quality, fisheries resources, waterfowl and marine mammals.

10. Alyeska is under a mandatory and continuing legal obligation to contain and cleanup the existing Valdez spill. Alyeska's inadequate response to the spill under the plan to date demonstrates its inability to respond as required under the plan to any new oil spills.

11. Continued operation of Alyeska's Marine Terminal and tanker traffic at the current crude oil flow rate creates a substantial potential risk of an additional oil spill at Alyeska's Marine Terminal or in Prince William Sound.

12. If an oil spill occurs, it will result in or is likely to result in irreversible or irreparable damage to the natural resources or environment and will result in or is likely to result in an imminent or present danger to the health or welfare of the people of the state.

13. Alyeska has demonstrated an inability to respond as required under its plan. Therefore, it is necessary to add supplemental procedures to the plan. A Notice of Modification of Alyeska's oil spill contingency plan has been ordered by the Department of Environmental Conservation. It would be prejudicial to the interests of the people of the State of Alaska to

delay action on the Notice of Modification until an opportunity for a hearing can be provided because of the substantial threat of a catastrophic oil spill for which there is not an adequate response capability in place. Therefore, an Emergency Order under AS 46.03.820 is appropriate.

14. Furthermore, the Governor of the State of Alaska has declared the Valdez oil spill an emergency under AS 26.23. AS 26.23.020(b) and AS 26.23.020(g) authorize the Governor of the State of Alaska to issue orders to control ingress to and egress from an emergency site to achieve the purposes enunciated in AS 26.23.010 (1) and (7).

15. An Emergency Order was issued on April 7, 1989 requiring Alyeska to modify its oil spill contingency plan on an interim basis (until a wholly revised plan could be put into place) to provide for a substantially enhanced plan to prevent and contain oil spills. It is now necessary and appropriate to modify the original Emergency Order, as follows, to specifically provide for the implementation of an Interim Operating Plan for oil spill response.

ORDER

Based upon the foregoing findings, I order as follows:

1. Alyeska must have in place the complete core inventory of all terminal contingency plan equipment for the Marine Terminal described on pages 9-133 and 9-134 of the plan, within 72 hours from receipt of this Notice. Alyeska must identify to DEC in writing, within 72 hours of this notice, the storage locations of all core contingency plan equipment. Thereafter, Alyeska may

not use core contingency plan equipment in any operation except oil spill response and training;

2. Alyeska must designate a round-the-clock oil spill response crew of a minimum of 12, plus crew supervisors, located at the terminal, which crews and supervisors shall be immediately available and have as their sole responsibility oil spill response. The terminal response crew is in addition to the manpower required to implement the Interim Operating Plan referenced in paragraph 8. The minimum terminal crew may be augmented by additional crew at the terminal or at other locations to enhance oil spill response capability. Alyeska must identify to DEC in writing, within 72 hours of this notice, the designated shift supervisors and, within 7 days from this notice, the shift crews. Alyeska must, thereafter, notify DEC in writing within twenty-four hours of any crew or supervisor changes.

3. Alyeska must boom all tankers upon arrival. Alyeska must inspect boomed areas hourly for spills; Alyeska must inspect for the presence of oil in all boomed areas prior to the tanker deberthing;

4. Alyeska must deberth tankers only during daylight (dawn to twilight) hours until it complies with paragraphs 1 and 2 above;

5. Alyeska must load only one tanker at a time until it complies with paragraphs 1 and 2 above;

6. Alyeska must ensure that two tugs accompany all outgoing tankers to Hinchinbrook Entrance southeast of Seal Rocks;

7. Alyeska must ensure that there is a pilot aboard all cargo laden tankers to a designated pilot embarkation station at Latitude 60° 48'N, Longitude 147° 01'W, south of Bligh Reef. Alyeska must ensure that a pilot federally licensed for the waters of Prince William Sound is aboard any cargo laden tanker between the Valdez Marine Terminal and Seal Rocks. Alyeska must have in operation not later than May 15, 1989, an effective alcohol testing program for command officers (Captain and Chief Engineer) of tankers.

8. Alyeska shall secure the equipment, employ the necessary personnel and otherwise take all actions necessary to perform all of the terms and conditions of Alyeska's Interim Operating Plan dated May 1, 1989 as submitted to DEC on May 1, 1989, the same being incorporated herein by reference. To the extent any of the provisions of the Interim Operating Plan are inconsistent with the provisions of Alyeska's existing Oil Spill Contingency Plan, the provisions of the Interim Operating Plan shall be controlling; provided that nothing herein shall serve to alter those provisions of the existing Oil Spill Contingency Plan which provisions are not within the scope of the subject matter of the Interim Operating Plan. The Interim Operating Plan does not constitute a modification to Alyeska's existing Oil Spill Contingency Plan, which shall remain in effect until a revised Alyeska plan is approved by DEC, or this Interim Operating Plan is otherwise terminated by law or by agreement of DEC and Alyeska.

9.a. Alyeska's Valdez Marine Terminal operations center must maintain direct radio contact with the bridge of each incoming and outgoing tanker, accompanying tugs, and Alyeska's oil spill response vessels while an incoming or outgoing tanker is located at any point between the terminal and Seal Rocks at the Hinchinbrook Entrance. Alyeska must record all radio transmissions and preserve each recording for a period of at least 30 days, unless Alyeska receives a notice under paragraph 9.b. below, in which case Alyeska shall immediately transmit the original of the recording(s) to DEC's Valdez District Office.

b. Alyeska must require each tanker, accompanying tugs, or Alyeska's oil spill response vessels to notify Alyeska immediately by radio transmission if an incident occurs or there is any irregularity or indication of a problem which threatens or may threaten the tanker or its cargo (including ballast water). Specifically, notice is required if the tanker leaves both of the U.S. Coast Guard designated Prince William Sound and Valdez Arm traffic lanes (except when an outbound tanker leaves the lanes at their Hinchinbrook Entrance terminus).

c. Alyeska must alert all of its oil spill response teams and initiate all actions needed for an immediate response whenever the pilot or master or any officer of a vessel or an accompanying tug or escort vessel reports that a situation exists which presents a danger to the integrity of the vessel or its cargo or which may result in an oil discharge. Alyeska must also immediately provide oral notice to the Department of Environmental Conservation Valdez District Office Supervisor. Alyeska

must implement the Interim Operating Plan referenced in paragraph 8 upon Alyeska's receipt of notice under this paragraph.

10. Alyeska must prepare and submit to DEC, by no later than August 1, 1989, an application for approval for a revised oil spill contingency plan. This application will incorporate at a minimum the terms and conditions in paragraphs 1, 2, 3, 6, 7, 8 and 9 herein, as modified to reflect any experience gained in Alyeska's implementation of the Interim Operating Plan which may offer enhanced capabilities to prevent or respond to oil spills. Between the date of this Modified Emergency Order and August 1, 1989, Alyeska (or its representatives) will meet with DEC on a mutually agreeable schedule to review the development of Alyeska's proposed, revised oil spill contingency plan application.

PROCEDURES

Respondent has the right to present evidence or request a hearing to review this Order by 6:00 p.m. May 4, 1989. The department may schedule a hearing at the earliest possible time of such a request is made pursuant to AS 46.03.820(b) and (c).

Any request for hearing or submission of evidence should be made by delivery of the enclosed Notice of Defense to the Department of Environmental Conservation, P.O. Box 0, Juneau, Alaska 99811-1800. Failure to request a hearing or submit evidence within the time period specified constitutes a waiver of respondent's right to review this Order.

The submission of an application or the scheduling of hearing does not stay the operation of this Order.

PENALTIES

Any person who violates this Order is subject to criminal prosecution under AS 46.03.790. Additionally, the person is liable in a civil action under AS 46.03.760 for a sum of not less than \$500 nor more than \$100,000 for the initial violation and not more than \$5,000 each day thereafter that the violation continues. Penalties beyond the minimum amount are computed on the basis of liquidated damages, reasonable administrative costs incurred by the department, and the economic savings realized by the respondent.

AS 46.03.820(d) authorizes the Attorney General to seek enforcement of this Order if respondent fails to immediately comply with its provisions.

Additionally, if respondent disobeys or resists the terms of this Order, the department may, under the authority of AS 44.62.590, petition the Superior Court for an order directing respondent to show cause why it should not be held in contempt of court. If respondent is adjudged in contempt, respondent may, under the terms of AS 09.50.050, be imprisoned until such time as the terms of the Order are met.

This Order does not constitute a waiver by the Department of Environmental Conservation of the provisions of any other state law or regulation and the Department of Environmental Conservation reserves all lawful remedies in equity, by statute, or the common law.

Dated May 3, 1989

DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Dennis D. Kelso, Commissioner
Department of Environmental Conservation

STATEMENT OF

JAMES B. HERMILLER
CHIEF OPERATING OFFICER OF
ALYESKA PIPELINE SERVICE COMPANY

BEFORE THE
ALASKA OIL SPILL COMMISSION

SEPTEMBER 1, 1989

Mr. Chairman, Members of the Commission:

I am James B. Hermiller, Executive Vice President and Chief Operating Officer of Alyeska Pipeline Service Company. I have held this position since July 19, 1989 when I transferred from my previous position as Vice President of Refining at BP Oil. As you may know, Alyeska's President, George Nelson, has announced his retirement which will be effective October 1, 1989. At that time I am to become president of the company.

I appreciate the opportunity to meet with you today. I know that our Vice President for Operations, Theo Polasek, has already appeared before you to discuss Alyeska's response to the EXXON VALDEZ grounding and spill. I am pleased to be here to describe our current spill prevention and response efforts and the Tanker Spill Prevention and Response Plan that we have submitted to the State.

There were lessons for everyone in the EXXON VALDEZ spill. As you know, prior to that spill, the State of Alaska called upon Alyeska to plan for the "most likely" spill, to have equipment and materials, and train and drill for the "most likely" spill. It had been agreed between government and the private sector that the "most likely" spill would be 1,000 to 2,000 barrels and the approved Prince William Sound Contingency Plan was based and approved on that standard.

We and the State had been led to believe that Alyeska's preparation for the most likely spill was sufficient because of our uniform success in preventing catastrophic spills. Prior to March 24, 1989, the largest spill at the Terminal or in Prince William Sound had been the 1700 barrel spill from the tanker Thompson Pass. Other spills had been much smaller. Alyeska had been highly successful in responding to all of these earlier spills.

Unfortunately, as we all know, the "most likely" spill is not what Alyeska or the people of Alaska faced on the morning of March 24th. The EXXON VALDEZ spill was a catastrophic event, well over 100 times larger than the "most likely" spill. It demonstrated that additional effort must be expended to prevent anything like this ever happening again.

I am proud to say that the Plan we have submitted to the Alaska Department of Environmental Conservation ("ADEC") reflects a commitment of personnel, equipment, and organization that is second to none in the world. The Plan's primary emphasis is prevention. It provides multiple layers of prevention measures that we believe minimize the possibility of an event in Prince William Sound that might cause a spill. In addition, however, should a spill occur, the Plan provides for

more skimming capacity, more boom, and more storage capacity than any similar plan of which Alyeska is aware. The Plan provides that Alyeska will be continuously prepared to respond to a spill in Prince William Sound.

The Plan also is unique in its involvement of the local communities around Prince William Sound. The Plan provides for the establishment of a Citizens Advisory Committee for Prince William Sound to advise Alyeska with regard to matters pertaining to the Plan. This will be a continuation of the Alyeska Citizens' Interim Advisory Committee, which has been intimately involved in the preparation of the Plan. At the recommendation of the Citizens' Interim Advisory Committee, the Plan provides for Community Response Centers, which will supply local residents in designated areas with boom and other equipment to assist in the protection of their own shorelines.

Finally, the Plan adopts an organizational structure that fits well with government agencies and local communities that will be involved in any spill response. At the request of the local communities, Alyeska has organized its spill response team under the Incident Command System ("ICS"), a recognized management organizational structure used for responding to emergencies. This structure has been adopted because the State of Alaska, the U.S. Coast Guard, and most of the local emergency response organizations that now exist around Prince

William Sound use ICS, and it is believed that the similarity in organization will facilitate interaction with these entities in the event of a spill.

We estimate that maintaining the level of preparedness called for in the Plan will cost in excess of \$45 to \$50 million annually.

With this general overview in mind, I will now describe for you our current operations under the Interim Operating Plan and then describe the new Plan we have submitted to ADEC in more detail so that you can understand the approach we have taken and the commitment we have made.

1. The Interim Plan.

First, I will describe the Interim Plan.

Alyeska is currently operating under an Interim Operating Plan dated May 1, 1989 which was adopted by Alyeska in consultation with ADEC. The Interim Plan was adopted pursuant to a modified Emergency Order and a Modified Notice of Modification of ADEC's Approval of Oil Discharge Contingency Plan, both of which are dated May 3, 1989, as amended by stipulation dated May 12, 1989 (collectively, the "Emergency Order"). Alyeska agreed with ADEC that steps should be taken

quickly following the EXXON VALDEZ incident to increase the oil spill response capability for Prince William Sound.

Accordingly, Alyeska and ADEC agreed on an Interim Plan that has served as the basis for the Plan submitted on August 1, 1989.

The Interim Plan was fully activated on July 12, 1989. The central feature of the Interim Plan is the Ship Escort/Response Vessel System ("SERVS"). SERVS is a separate division of Alyeska. Its manager reports to Alyeska's Vice President of Operations, Theo Polasek.

The major focus of SERVS is prevention. We require that two vessels accompany each laden outbound tanker from the Marine Terminal to Hinchinbrook Entrance. At least one of these two required vessels is an Escort/Response Vessel ("ERV"). These ERVs are unique oceangoing, ice-strengthened tugs; 210 feet long, 7,000 horsepower vessels that can tow or assist a tanker experiencing power or navigation problems. They have twin variable pitch propellers and bow thrusters making them more manageable than standard tugs. The personnel on the ERVs and escort tugs are additional observers of a tanker's journey through the Sound. In addition, each ERV has on board a spill supervisor to monitor the escorted tanker, to direct rapid spill response by boom and skimmer deployment, and to summon additional equipment and personnel. For response to

a spill, each ERV carries 4,600 feet of containment boom, two Vikoma SS 50 oil skimming machines, and a 20-foot workboat. Each ERV also has the capacity to store 4,000 barrels of recovered oil.

SERVS and its ERVs will continue under the Plan we submitted to ADEC on August 1. To understand the new Plan we have submitted, it is important to focus on the statutory background and actual regulatory climate within which Alyeska has operated.

2. Alyeska As Oil Spill Response Contractor.

Alaska law requires each tank vessel loading oil at the Valdez Terminal to have a vessel Oil Spill Contingency plan approved by ADEC. Alyeska is required to have an oil spill contingency plan for oil discharges from its Terminal facilities, but it is not required by statute to have a contingency plan for tanker spills in Prince William Sound.

In the past, ADEC has not consistently required vessels to have contingency plans because Alyeska has voluntarily maintained a contingency plan for Prince William Sound, the most recent of which was in effect at the time of the EXXON VALDEZ accident. In the aftermath of the EXXON VALDEZ spill, ADEC and others have expressed concern that the

relationship between Alyeska and the vessel owner/operator should have been spelled out more clearly. While Alyeska believes that all such relationships were clearly understood by ADEC and others under the 1987 PWS plan, our new Plan is even more explicit on this subject.

Under the new Plan, Alyeska offers its services as an oil spill response contractor to those vessel owners/operators desiring to retain Alyeska's services. The vessel owners/operators may incorporate Alyeska's Plan, or an equivalent plan, into the contingency plans that they submit to ADEC. After Alyeska's Plan is approved by ADEC, each vessel owner/operator would either have to obtain approval from ADEC for the rest of its contingency plan or be prohibited by State law from receiving oil at the Valdez Terminal.

The new Plan provides that Alyeska will make the initial response to a discharge from a contracting vessel in Prince William Sound. Thereafter, the Plan provides for a smooth transition of management and control of the spill response to the owner/operator of the discharging vessel. If the vessel owner/operator does not have the resources to assume management and control of a major spill response, the new Plan provides for the vessel owner/operator, in consultation with

ADEC and subject to ADEC's approval, to designate in its contingency plan a financially responsible party to assume management and control of the spill response.

The roles of Alyeska and the owner/operator of the discharging vessel are carefully defined to make the most efficient use of resources for a spill response. Alyeska's chief responsibility is operation and maintenance of the Trans-Alaska Pipeline and the Valdez Terminal. Yet, as operator of the Terminal, Alyeska is in a position efficiently to maintain efficiently the personnel and equipment for an immediate response to a tanker discharge in Prince William Sound. If the spill is of a magnitude to require a prolonged response, however, the vessel owner/operator, or its designee, will be in a better position than Alyeska to call upon the worldwide resources that may be needed.

3. Prevention.

As I mentioned before, and emphasize again here, the first line of defense under the Plan is prevention. A significant aspect of spill prevention under the new Plan is the continuation of the ERV system that I have described. Alyeska believes that this will reduce the risk of a tanker straying into hazardous waters or

colliding with other vessels. The escorting tugs and ERVs will be equipped to take a tanker in tow and with a bow fender system to provide pushing assistance. In addition, each tanker calling at the Terminal will be fitted with an emergency towing wire to allow for an emergency tow, and an Emergency Towing Contingency Plan will be established under the new Plan. All of this should help to prevent spills from occurring as a result of a tanker becoming disabled due to a power loss or major gear failure.

Spill prevention under the Plan also includes a program by which personnel of vessels calling at the Terminal will be subject to alcohol screening at the Terminal. Vessel owners/operators will also conduct drug-testing of crew members as required by regulations of federal agencies.

Each vessel calling at the Terminal is required by law to participate in the United States Coast Guard (USCG) Vessel Traffic Service (VTS) at Valdez. The VTS System allows the U.S. Coast Guard to monitor each vessel as it transits Prince William Sound. Alyeska agrees with local Prince William Sound communities that the Coast Guard should institute a mandatory vessel traffic control system in the Sound. As an added precaution, Alyeska will maintain radio contact with each

laden vessel until it leaves Prince William Sound. Pilotage coverage has also been tailored to the specific needs of Prince William Sound.

Finally, Alyeska has commissioned a risk assessment study to identify the manner in which spills are likely to occur and to evaluate the effectiveness of prevention and response measures. This study, which is scheduled for completion by the end of the year, may suggest additional preventive measures.

4. Preparation.

The second line of defense under the Plan is preparation. Alyeska shall maintain a team of seventy-eight persons on duty twenty-four hours per day to respond to a tanker spill in Prince William Sound. In addition, Alyeska has acquired substantial quantities of spill response equipment. This includes more than 30,000 feet of boom, skimming equipment with nameplate capacity of 10,000 barrels per hour, storage equipment with nameplate capacity of more than 450,000 barrels, and pumps for lightering with nameplate capacity of more than 10,000 barrels per hour.

Nameplate capacity is a figure provided by the manufacturer to reflect the optimal capability of its equipment. The operational capabilities of the equipment are lower and will depend upon the circumstances in which it is used. Nameplate capacity is useful to describe the quantities of equipment on hand but should not be taken as a representation of the equipment's ability in an actual spill situation.

Alyeska has stockpiled spill response equipment at Cordova, Whittier and the Valdez Terminal for efficient deployment. Alyeska has also undertaken to supply, in advance, the five fish hatcheries in Prince William Sound with boom for their protection in the event of a spill. In addition, designated Community Response Centers will be equipped with boom to assist in shoreline protection. These Centers will use local emergency response organizations (such as fire departments) to assist if a spill occurs. The Citizens Advisory Committee that I referred to earlier will continue to provide Alyeska with input on the Plan.

Training drills will be an important part of Alyeska's preparation. One of the purposes of these drills will be to test the coordination and joint

participation with Alyeska of the Coast Guard, ADEC, local communities, and vessel owner/operators. In addition to their value as a learning experience, these drills will assist Alyeska in evaluating its prevention and response measures.

5. Response.

The Plan provides an organization, equipment and trained personnel to carry out an initial response to a tanker spill in Prince William Sound. The Plan's spill response section presents a three-part approach: (a) an on-water response, (b) near-shore response, and (c) on-shore response.

(a) On-water Response.

If a tanker spill should occur, at least one ERV will be at the scene immediately because it will be escorting the tanker. A trained oil spill response supervisor will be aboard the ERV to take immediate command of the spill response. The ERV will be equipped with two types of containment boom -- rapid deployment boom and ocean boom -- providing alternative equipment to be used by the ERV supervisor depending upon sea conditions. The ERV will begin to deploy its boom to

attempt to contain the spill, using a work boat carried on the ERV to assist in deployment. The ERV's two Vikoma sea skimmers will be available to begin skimming operations if feasible.

Contemporaneously, the ERV Supervisor would notify the duty officer at the Terminal. The duty officer would mobilize additional response vessels. The available vessels would include two additional ERVs, a Weir Boom Response Vessel ("WRV"), a Dynamic Skimming Vessel ("DSV"), and a lightering vessel, all of which are to be loaded and ready to respond upon notification of a spill.

The techniques available to combat a spill are dispersants, in situ burning, and mechanical recovery. Which of these techniques will be the most effective will depend upon the circumstances of the spill. In some instances a combination of these response techniques will be used.

The DSV, WRV, and skimming equipment on the ERVs will be available for mechanical recovery. The ERVs will also be equipped with dispersants, and sizeable quantities of dispersants will be stockpiled for prompt use in Prince William Sound. A burning plan will also be in place.

Dispersants and burning both require government approval. Moreover, both techniques are generally effective only during a relatively narrow time window. Accordingly, when Alyeska decides that dispersants or in situ burning should be used, government decisions must be made promptly. Although Alyeska will do what it can to improve approval procedures, this is an important element of Alyeska's spill response strategy that is largely beyond Alyeska's control.

(b) Near-Shore Response.

If a spill cannot be completely contained, it is important to limit the environmental effects of the spill through protection of sensitive shoreline areas. The near-shore response begins with identification of areas that are likely to be impacted. This is to be done under the Plan through surveillance and use of computer trajectory models. Environmentally sensitive areas will be identified within the area of likely impact through prior planning and guidelines set forth in the Plan. The Plan presents a strategy for deflecting the spill from these sensitive areas through booming and skimming.

Local Community Response Centers will assist in the near-shore response. The towns and villages around Prince William Sound are already organized to respond to emergencies such as fires or natural disasters. Alyeska will build upon these local response organizations to train and equip local volunteers to participate in the near-shore response under Alyeska's supervision and control. The Community Response organizations are among the first to be notified in the event of a spill.

(c) On-shore Response.

The new Plan contains a detailed strategy for on-shore cleanup. The objective of this response strategy is to minimize the overall ecological impacts of a spill. Although everyone hopes that on-shore cleanup will never be necessary, considerable benefits can be achieved through prior planning for that eventuality. Equipment suitable for on-shore clean-up, such as containment boom, skimmers, and vacuum systems, will be maintained, and the Plan contains a strategy for use of that equipment to mitigate the effects of a spill.

6. Spill Variables.

In any response effort there are many variables beyond the control of the response organization, such as weather, visibility, sea conditions, location of spill, type of oil spilled, rate of discharge, status of discharging vessel, status of remaining cargo and safety considerations. Because of these variables, it is not possible to guarantee response performance in accordance with the estimates or strategies contained in the new Plan.

The new Plan provides, however, that in the event of an oil spill, Alyeska will act in accordance with the Plan to remove or disperse as much spilled oil as conditions allow. Alyeska anticipates that in many circumstances smaller spills (less than 1,000 barrels) can be substantially controlled and recovered. There will be few circumstances in which a catastrophic spill (over 100,000 barrels) can be substantially contained, but this Plan is designed to make it possible to contain and recover -- by mechanical means, burning, and/or use of chemical dispersants -- a significant portion of a catastrophic spill in those circumstances. In addition, the near-shore strategy for protecting environmentally sensitive areas and planning for onshore cleanup are

integral features of the Plan that will be particularly important in the event of a major spill.

7. Organization and Call-Out.

As I have mentioned, the Incident Command System, or ICS, has been adapted for use under the new Plan. Under the ICS approach, command will be passed upward as an ever expanding force is brought on the scene, as necessary, to respond to an oil spill.

When a spill occurs from a contracting vessel in Prince William Sound, the first Alyeska commander will be the ERV Supervisor aboard the ERV accompanying the tanker. There will be fourteen spill response personnel aboard the escort vessels -- six aboard the escort tug and eight aboard the ERV, and this team will be immediately available to the ERV Supervisor at the scene.

As soon as a spill occurs, the two remaining ERVs (each with 8 personnel and 1 supervisor), the WRV (8 personnel and 1 supervisor), the DSV (9 personnel), the lightering vessel (9 personnel), and the remaining ship assist tugs (18 personnel) will all be available for response. Presently, these personnel work twenty-four hour shifts, one week on and one week off, and stay with

their vessels. The Plan also provides for six support staff and a duty officer to be on duty at all times at the Terminal. Thus, a team of seventy-eight individuals will be at the disposal of the ERV Supervisor almost immediately after the ERV Supervisor learns of a spill. In addition, 4 off-shift supervisors and 18 off-shift support staff will be available for call-out to reinforce the response effort.

Upon notification of a spill, the Oil Spill Superintendent will proceed to the Terminal and assume command of the spill response. In a response to a major spill, a senior Alyeska official will assume the role of Incident Commander, having overall command of the spill, and another management level person, the Operations Section Chief, will be responsible for supporting the response operation from the Valdez Terminal.

The Oil Spill Superintendent will supervise directly the on-water, near-shore, and onshore responses. Alyeska has retained the services of Dave Neilson to serve as Oil Spill Superintendent. Mr. Neilson is an experienced manager of oil spill response operations. The objective is to have on scene a person with the training and experience to make the tough subjective decisions that must be made in any oil spill response. That individual

will then direct the resources available to him in accordance with the Plan.

8. State and Federal Agencies.

The federal government has assumed a direct role in oil spill responses through the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"). Pursuant to the NCP, direct supervision of contingency planning for Prince William Sound is vested with the Regional Response Team ("RRT") for the State of Alaska. The RRT is comprised of the U.S. Coast Guard, the Environmental Protection Agency, Department of Agriculture, Department of Defense, Department of Commerce, Department of Energy, Department of Health and Human Services, Department of Interior, Department of Justice, Department of Labor, Department of State, the Federal Energy Management Agency, and ADEC. The RRT is specifically imbued with authority and responsibility for advance planning for use of dispersants and burning during a spill response. The NCP also establishes the role of the On Scene Coordinator ("OSC"), which in the event of a marine incident is the Commandant of the U.S. Coast Guard.

The U.S. Coast Guard is responsible for tanker safety under federal law. Although Alyeska may assist

tankers as specified in the Plan, ultimate control of vessel operations in the Sound lies with the U.S. Coast Guard, not with Alyeska.

The State of Alaska has assumed responsibility for local contingency planning through ADEC. As a member of the RRT, ADEC also participates in decisions concerning use of dispersants and in situ burning.

Conclusion.

It is my understanding that among the responsibilities with which you have been charged is to offer recommendations to the Alaska legislature based upon your investigations, research and collective analysis of all such input. In that context I observe that the new Plan that Alyeska has submitted to ADEC and that we have already implemented to a significant degree represents decisive action to prevent future spills.

As we move forward in our planning and preparation we are mindful that the United States Congress also is considering legislation that could impact the way the state and Alyeska approach the future. S.686, the bill the United States Senate passed August 4 has a number of provisions relating to oil spill response capabilities,

including review of contingency plans, conducting of drills and inspections of equipment. The House of Representatives has also been quite active and several important proposals have been reported by critical standing committees. One, H.R. 3027, includes provisions regarding authority to direct spill responses and authority to review response plans, training and equipment. Much important work is being done by different governmental bodies.

Alyeska is prepared to work with these agencies to help prevent oil spills and to respond to oil spills as effectively as is feasible under the circumstances. We do hope that these various efforts will be coordinated so that the challenge before us can be addressed effectively and efficiently.

0758A

8/22/89

Alaska Pipeline Service Company

Notice to Masters

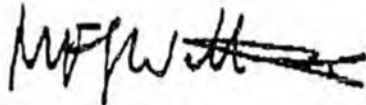
The new Oil Spill Prevention Plan for Prince William Sound requires all laden or part laden tankers trading to the Valdez Marine Terminal to be escorted by two tugs when on passage between the Terminal and the entrance to Cape Hinchinbrook. At least one of these escorting tugs will be an Escort Response Vessel (ERV).

To ensure that the maximum benefit is obtained from these escorting tugs, the following rules have been developed by Alyeska and the Owners of tankers trading to Valdez. These rules are to be followed unless the safety of the tanker is an issue. Final authority relating to the navigation of the tankers must rest with the Master but the Fullest Cooperation is expected from Masters in implementing these Rules.

1. The maximum speed for tankers through Prince William Sound will be 10 knots, unless lower speeds are mandated or are requested by the escorting tugs.
2. Glacial ice maybe encountered between Rocky Point and Bligh Reef and tankers will reduce speed in this area. Masters should be prepared to further reduce speed to the lowest speed consistent with safe navigation. Masters of the escort tugs and pilots will cooperate fully with these maneuvers.
3. Tankers navigating in the Prince William Sound will remain in the Vessel Traffic Lanes. No tanker will use other routes such as Montague Passage nor deviate out of the lanes.
4. Tanker Masters will maintain regular radio contact with the escorting tugs throughout the passage. Masters shall inform the Escorting tugs of all major course or speed changes. If two ERV's are escorting the tanker, then one will identify his ship as the Senior Escort at the start of the passage. If the tanker is escorted by a tug and an ERV then the ERV is automatically the Senior Escort.
5. It is required that the escorting tugs remain within one half mile of the loaded tanker throughout the passage unless, through this requirement, the safety of any of the vessels is compromised.

6. On board each ERV there is a Vessel Supervisor. His role is to monitor all escorted tankers for oil spills or leakage. If the Vessel Supervisor believes that there is an oil spill or risk of an oil spill he must notify the authorities of an oil spill alert. Therefore, if the Vessel Supervisor informs the Master that there is an oil spill or risk of an oil spill, the Master must stop his ship as soon as it is safe to do so.
7. The above rules will continue to apply until the Master of the Senior Escort informs the Master of the tanker that he is clear of Prince William Sound and that his ocean passage has commenced.

It is recognized by Alyeska and the Owners of tankers trading to Valdez that the above rules will slow down shipping. This fact is accepted by Alyeska, the vessel owners, charterers, and Masters will not be censured in any way for following these instructions.



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COMMENTS BEFORE
ALASKA HOUSE RESOURCES COMMITTEE
ON
OIL SPILL CONTINGENCY PLANNING

MISTER CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM ROBERT WEATHERFORD, BUSINESS ANALYSIS MANAGER FOR EXXON SHIPPING COMPANY. AMONG OTHER ACTIVITIES, MY ORGANIZATION'S RESPONSIBILITIES CURRENTLY INCLUDE COORDINATING CONTINGENCY PLANNING FOR EXXON SHIPPING. I APPRECIATE THIS OPPORTUNITY TO APPEAR TODAY AND COMMENT ON WHAT OIL SPILL CONTINGENCY PLANS SHOULD BE INTENDED TO ACCOMPLISH AND WHAT THEY CANNOT ACCOMPLISH.

IT IS OUR VIEW THAT OIL SPILL CONTINGENCY PLANS CAN PROVIDE A FRAMEWORK WHICH WHEN COMBINED WITH EFFECTIVE IMPLEMENTATION CAN MITIGATE THE EFFECTS OF AN OIL SPILL. OIL SPILL CONTINGENCY PLANS CAN DEFINE THE RESPONSIBILITIES OF THE INDIVIDUALS INVOLVED IN AN OIL SPILL RESPONSE AND ASSOCIATED TRAINING NEEDS. THE PLANS CAN DEFINE WHAT PEOPLE AND EQUIPMENT CAN BE MOBILIZED AND DEPLOYED, AND THEY CAN DEFINE IN ADVANCE WHAT ENVIRONMENTALLY OR ECONOMICALLY SENSITIVE AREAS SHOULD BE PROTECTED IF THREATENED. THE PLANS CAN IDENTIFY WHAT OTHER RESOURCES, INCLUDING THOSE FROM OTHER LOCATIONS, CAN BE MOBILIZED. IN TOTAL, OIL SPILL CONTINGENCY PLANS ARE CRITICAL TO ADEQUATE PREPARATION. OIL SPILL CONTINGENCY PLANS CAN ALSO PROVIDE ESSENTIAL INFORMATION THAT IS USED DURING THE EXECUTION PHASE OF A RESPONSE. FOR EXAMPLE, INFORMATION ON AVAILABLE RESOURCES CAN BE USED IN CONJUNCTION WITH ON-SITE ASSESSMENTS OF NEED TO DECIDE WHAT AND WHERE EQUIPMENT AND MANPOWER SHOULD BE MOBILIZED AND DEPLOYED.

WHILE CONTINGENCY PLANS ARE AN ESSENTIAL PART OF BOTH PREPARATION AND EXECUTION, THERE ARE SOME THINGS THEY CAN NOT DO ALONE. THEY CAN NOT GUARANTEE AN EFFECTIVE RESPONSE. THAT DEPENDS, IN PART, ON THE APPROPRIATE PARTIES DISCHARGING THEIR RESPONSIBILITIES IN A COORDINATED, EFFECTIVELY LED EFFORT. WITH THE LIMITATIONS OF TODAY'S TECHNOLOGY, NO

CONTINGENCY PLAN CAN PREVENT LARGE OIL SPILLS FROM HAVING A SIGNIFICANT IMPACT. WHEN LARGE SPILLS HAVE LITTLE IMPACT, IT HAS BEEN BECAUSE OF THE LOCATION AND OTHER FACTORS BEYOND HUMAN CONTROL. THE KEY CONTINUES TO BE IN PREVENTING THE SPILL IN THE FIRST PLACE. IN ADDITION, CONTINGENCY PLANS CANNOT DEFINE THE SPECIFIC ACTIONS THAT WILL NEED TO BE UNDERTAKEN DURING A RESPONSE DUE TO THE INFINITE COMBINATIONS OF CONDITIONS THAT MAY EXIST.

THE IMPORTANCE OF CONTINGENCY PLANNING HAS OBVIOUSLY BEEN RECOGNIZED FOR A NUMBER OF YEARS AND EXXON HAS HAD EXTENSIVE ON-GOING EFFORTS TO DEVELOP CONTINGENCY PLANS AND TO PARTICIPATE IN RELATED ACTIVITIES TO RESPOND TO OIL SPILLS. THESE EFFORTS ARE CONTINUING. IN THE AREA OF SIGNIFICANT CONCERN TO THIS COMMITTEE, WE ARE WORKING CLOSELY WITH ALYESKA TO DEVELOP A REVISED AND EXPANDED CONTINGENCY PLAN FOR PRINCE WILLIAM SOUND. ASSUMING A REASONABLE, WORKABLE PLAN IS AGREED UPON BY ALYESKA AND THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WE PLAN TO INCORPORATE MOST, IF NOT ALL, OF THE ALYESKA PLAN INTO OUR PLAN. WE WILL PLAN TO SUPPLEMENT ALYESKA'S SIGNIFICANT CAPABILITY WITH OUR OWN. WITH THESE COMBINED CAPABILITIES, AND WITH THE GUIDANCE AND COOPERATION OF ADEC, I AM CONFIDENT THAT WE WILL HAVE A WELL THOUGHT OUT CONTINGENCY PLAN THAT SHOULD PROVIDE THE BASIS FOR THE BEST POSSIBLE RESPONSE IN THE EVENT OF A SPILL.

ATTACHMENT #1

INTRODUCTION

Name, etc.

OPENING REMARKS

Been asked to explain the INCIDENT COMMAND SYSTEM (ICS)
(DISPLAY HANDBOOK - FIELD GUIDE)

To do this, I will depart somewhat from pure technical information specific to the ICS organization structure.

There is more to managing a major event than the organization structure chosen for on-scene management. It is important to touch on relevant aspects of the total approach to the use of ICS.

I will leave copies of my notes.

Hope to leave you with an understanding of WHY the Incident Command System was developed as well as WHAT it is.

Your interest (as I sense it) is in MANAGEMENT OF MAJOR EMERGENCY EVENTS so I will explain how it is done by the Wildland Suppression Agencies-that is my frame of reference.

WHAT IS ICS?

ICS is actually a component of a larger ~~program of a larger~~ system developed for interagency management of large forest fires occurring in an urban setting.

The complete system is called "NATIONAL INTERAGENCY INCIDENT MANAGEMENT SYSTEM".

Other components of NIIMS are:

- Training
- Qualifications and Certification
- Publications Management
- Supporting Technology

The ICS component of NIIMS is simply the ORGANIZATION DESIGN AND ROLE DEFINITIONS that personnel work under when managing a complex event.

It can be applied to any event or activity. It does NOT have to be an emergency.

- Mexico Earthquake
- Mt. Saint Helens Volcanic Eruption
- Exxon Valdez Oil Spill-Seward/Homer/Kodiak
- Hazardous Materials Fire-New York City

National Park Service use in all Search & Rescue
Operations.
Queen Elizabeth visit - California

ICS is applicable for:

Single Jurisdiction/Single Agency Response
Single Jurisdiction/Multi-Agency Response
Multi-Jurisdiction/Multi-Agency Response

ICS Accommodates a "Unified Command Structure"

Simply stated it means that all agencies who have a jurisdictional responsibility at a multi-jurisdictional event contribute to the process of:

- Determining overall incident objectives
- Selection of strategies
- Participation in joint planning for tactical activities
- Integrated operations are conducted
- Making maximum use of resources

WHY WAS ICS DEVELOPED?

For many years wildland suppression agencies applied a management structure called the "Large Fire Organization" when fighting major forest fires.

As fires become more prevalent in the urban setting of Southern California, other parties became more and more involved. Structure fireman, law enforcement agencies, local county governments, etc. where on-scene because of their responsibilities and obligations.

Homes were being burned = Structure fireman.
People were being evacuated = Police/Red Cross
Fires were crossing county lines = multiple Gov't interests
Peoples lives were disrupted = Politicians

A host of people with different disciplines, interests and motivations were coming together at the scene to do their best in resolving the problem, BUT:

People were not talking the same technical language.

Individuals were being asked to do tasks that they weren't trained to do.

Fire engines couldn't even talk to each other because of uncommon radio frequencies. No one could talk with the police except with CB radios.

Military involvement added another "mind set" operational mode.

Multi-jurisdictional "turf battles" were interfering with efficient operations even though lives were at risk.

People were causing emergencies within the emergency! People were being hurt, even killed because of conflicting direction, disjointed activities were resulting from "too many bosses".

DOES THIS HAVE A FAMILIAR SOUND?

These problems are not unique to managing a large fire.

ANY MAJOR EVENT THAT TRANSCENDS DIFFERING INTERESTS FACES THE SAME DILEMMA.

EMERGENCY RESPONSES ONLY DIFFER BECAUSE IT HAS TO BE DONE RAPIDLY.

IT COMES DOWN TO THE FUNDAMENTAL QUESTION: HOW DO YOU ORGANIZE TO MITIGATE CONFLICTING INTERESTS WHILE TAKING FULL ADVANTAGE OF THE RESOURCES AVAILABLE?

ALASKA SITUATION - A LIVING EXAMPLE OF ICS APPLICATIONS

Given the mixed ownership and protection requirements it has been prudent for the State, the Federal agencies (BLM & USFS) and many of the Volunteer and Municipal Fire Departments to share the wildland protection job.

Impractical to do unless we all worked under a common management structure in the field.

Before we can share personnel and equipment we had to adopt commonly acceptable training and experience standards. (We can ill-afford to place untrained-unqualified personnel in jeopardy)

Common terminology was necessary.

WE HAVE ADOPTED ICS AS THE "COMMON GROUND" ORGANIZATION

Aside from the more cost-effective posture brought by interagency protection, spin-off benefits are important to note.

The ability to receive assistance from the federal sector is highly important. We certainly don't own enough resources during severe fire seasons.

Because we adhere to ICS standards we have the countering ability to offer our personnel to assist in suppression actions else where in the nation.

An average of \$ 4 million/year in wages have been paid to village firefighting crews over the past 10 years.

WHAT DOES THE ICS MANAGEMENT STRUCTURE LOOK LIKE?

I would prefer to allow the ICS manual speak to the details and show how it is designed by functions.

HANDOUT # 2-3

MOBILIZATION AND SUPPORT

It is equally important that an ICS organization receives adequate support when on assignment.

The best teams are doomed to failure without supplies, proper manpower, etc.

To provide that support the fire community has developed the National Interagency Mobilization Guide.

Provides for consistency in the movement of personnel, equipment, aircraft, etc.

Provides direction and administrative procedures that all organizations can follow.

It contains the formal agreements between federal agencies that sets the stage for "TOTAL MOBILITY" of the Nations suppression resources.

DISPATCHING

None of this can work without a network of offices to do the coordination. Fire has developed a network of offices through out the nation.

THE DISPATCHING FUNCTION MAKES IT ALL COME TOGETHER

HANDOUT # 4

An example of the network is demonstrated for how we (fire community) supported the oil spill.

COMMUNICATIONS

Communications is a vital link in any event. Without the ability to coordinate on-going activities, planned actions and alternatives as the situation changes confusion will result.

While managing a major fire event one of the fundamental requirements under ICS is the development and distribution of DAILY SHIFT PLANS for both day and night activities. These documents communicate to the workforce what the planned course of action is to be for their workday.

Other requirements include:

Communications
Transportation
Medical
Safety

KEY ASPECTS FOR MANAGING MAJOR EVENTS

There are some areas that I think should receive attention by the State to improve our preparedness for disasters events.

1. AUTHORITIES

Fire protection agencies are able to mobilize resources at the local, national, and international level because authorities are in-place to provide for reimbursement.

TO MY KNOWLEDGE THERE ARE NO ESTABLISHED AUTHORITIES FOR USING FIRE SUPPRESSION RESOURCES IN NON-FIRE EVENTS EXCEPT:

BY GOVERNOR DECLARATION OF A DISASTER

BY PRESIDENTIAL DECLARATION OF A NATIONAL DISASTER

2. FISCAL MANAGEMENT

Funding (reimbursable agreements), accounting, procurement and property control procedures should be established that are easily implemented during the initial crisis period. What we do when life and property are at risk should be legal.

3. INTERAGENCY COORDINATION

During major events, you can be assured that it will cross jurisdictional boundaries, legal mandates, jointly shared responsibilities and obligations.

Priorities must be established by someone -or- a composite of individuals. (We call this Unified Command)

Consider this in light of experiencing a major earthquake

2 weeks into the oil spill!

To cope with priorities in the fire game we have organized what we call "MULTI-AGENCY COORDINATING GROUPS" (MAC Group)

When activity levels reach the point where not enough resources are available -or- when new fires pose a greater threat for harm these MAC Groups are activated to make decisions on priorities.

Local state level
National level

SUMMARY

Managing large fires routinely for many years has developed a certain "way of thinking" in the fire manager. Much of how the experienced fire manager responds comes fairly easy by the time he is at the Class II level. He has had to "think" Command, Logistics, Planning, Operations over and over again.

I don't mean that as a statement intended to support the use of Fire Overhead Teams on non-fire events, but rather to make the point that efficient response only comes with PRACTICE.

The ICS system has been with us for many years. It has been fine tuned over and over again. We as a national fire community are still fixing aspects of the system. It makes little sense to me that a different set of organizational parameters is needed.

It's my feeling that the fire community can offer some advice on emergency management. We've been at it for a long time. The last few years have certainly provided us with enough practice.

Outside the federal sector, the Division of Forestry is the only state agency with thorough qualifications in the Incident Command System.

How much involvement we may be asked to provide is undetermined. Major involvement would probably require a special obligation.

Emergency preparedness now rests with the Division of Emergency Services, Department of Military and Veterans Affairs.

Thank You for your attention.

Questions?

INCIDENT COMMAND

MULTI AGENCY COORD. GRP.
AUTHORITIES
REPRESENTATIVES

provides authority to merge
agency actions

INCIDENT COMMANDER

oversees all activities

COMMAND STAFF
=INFORMATION
=LIAISON
=SAFETY

PLANNING

strategic and tactical plans

LOGISTICS

on-scene logistical needs

OPERATIONS

technical and managerial direction to
all on-scene actions, specialized.

FINANCE

financial records and actions

positions filled with QUALIFIED personnel

MANAGEMENT OPTIONS

MULTI-AGENCY COORDINATING GROUP

M A C

the combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordination of assisting agency resources and support to agency emergency operations.

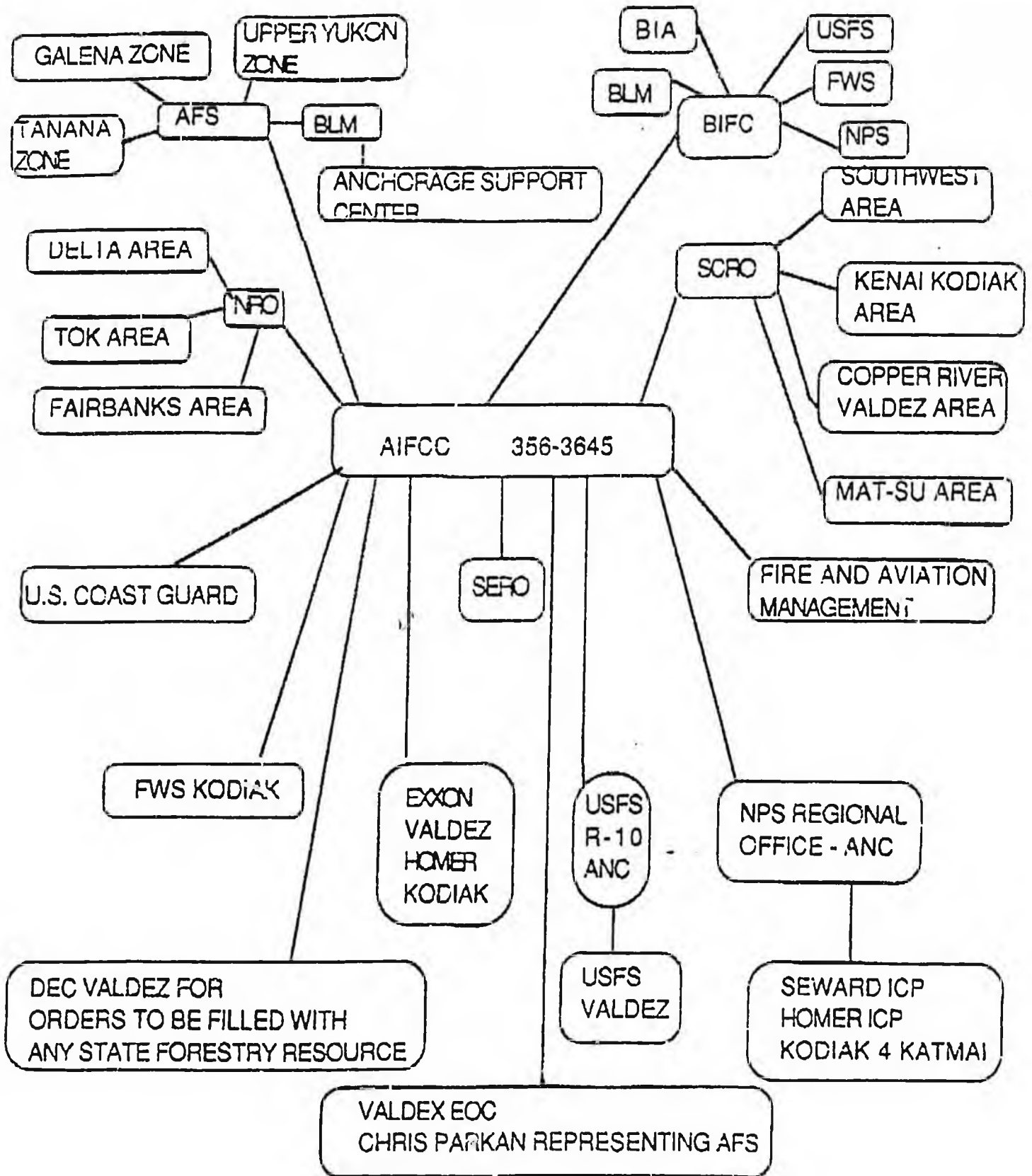
STRATEGY

UNIFIED COMMAND

a method for all agencies or individuals who have jurisdictional responsibility, and in some cases, those who have functional responsibility at the incident, to contribute to:

- =determining overall objectives
- =selection of strategy

TACTICS



OIL SPILL ORDER FLOW
 AIFCC IS PROCESSING ORDERS FOR MANPOWER,
 SUPPLIES, EQUIPMENT AND AIRCRAFT

TESTIMONY FOR HOUSE RESOURCES COMMITTEE
January 17, 1990

Thank you for the opportunity to testify. With me is Larry Dietrick, Director of the Department's Division of Environmental Quality. Larry's staff is responsible for oil spill contingency planning and for oversight of responses to spills when they occur.

Background

The Department of Environmental Conservation (DEC) responds to about 400 of the 3,000 oil spills reported each year. Under Alaska law, more than 400 oil handling facilities, barges, or tank vessels must have approved oil spill contingency plans.

When a spill occurs, the Department staff oversees the adequacy of the spill response. In the case of the T/V Exxon Valdez spill, DEC personnel went on-scene immediately, boarding the tanker at about 3:00 a.m. with the U.S. Coast Guard. The DEC spill response team mobilized immediately and set up operations in the state court building in Valdez. They initiated surveillance of the spill, monitoring of the response and interaction with the responsible parties, Coast Guard, fishermen, and other agencies. DEC personnel demanded repeatedly that Alyeska Pipeline Service Company implement the oil spill contingency plan. Alyeska claimed repeatedly that they were on the way; this was not true. Before the end of the first day, DEC requested the Regional Response Team to re-evaluate the capability of the responsible parties to conduct the necessary containment and recovery work.

On the second day, Exxon took over the response from Alyeska. This was done without consulting the state. Exxon also failed to follow the oil spill contingency plan for Prince William Sound, and valuable opportunities were lost. The Department and other state agencies then began an unprecedented effort to push the spill response to an effective level. With the cooperation and active assistance from local residents of Prince William Sound and from other state agencies, we simply began taking matters into our own hands, carrying out portions of the contingency plan that Exxon and Alyeska had abandoned. The Division of Emergency Services (DES) provided communications, air transportation, and other support. The Department of Fish and Game and the Cordova District Fishermen United joined us in our temporary spill response office in the court building. The Department of Natural Resources supplied field staff and offered equipment. Other departments -- Administration, Labor, Transportation and Public Facilities, Health and Social Services, Community and Regional Affairs, Public Safety, and others -- provided help or advice. We made contact with local officials in Valdez, Cordova, Tatitlek, and Chenega. During the first week, we began expanding

those contacts to other communities that would be threatened by the spill.

This was a very intense, highly technical response effort. It evolved as the oil went ashore in Prince William Sound, moved into the Gulf of Alaska, and hit the Kenai Peninsula, Kodiak, and the Alaska Peninsula. At that time the emphasis shifted to shoreline assessment and cleanup. Following Exxon's pullout in August and September, the emphasis changed again. Between mid-September and the end of 1989, the Department concentrated on updating information about shoreline condition, locating oily debris, reviewing available cleanup technology, and gathering scientific data.

Numerous firsts were achieved since the spill response began on March 24:

- * By the time Exxon was able to deploy its response effort, the state had already put in place most of the infrastructure for responding to the spill, including communications, oil tracking systems, computer data handling, technical and scientific assessments of the oil, air operations, and sampling and laboratory support.

- * Emergency orders were issued requiring tug escorts for tankers in and out of Prince William Sound, daylight tanker operations, and increased spill response capability.

- * The Department initiated air surveillance of the oil and set up a computer mapping and tracking system that became the standard reference.

- * DEC wrote agreements with local communities to compensate them for spill response activities.

- * Field staff identified the need for aircraft spotting to position skimmers, set up a barge in Prince William Sound as a helipad and refueling depot, and deployed boom by helicopter.

- * The Departments of Environmental Conservation and Fish and Game worked together with federal agencies to initiate a fish, vessel, and processor inspection program to guarantee that no contaminated fish reached market.

- * DEC worked with local fishermen on a spill response strike team to protect three hatcheries and Eshamy Bay by deploying boom to exclude oil from these sensitive areas.

- * In "The Battle of Sawmill Bay", DEC with the help of local fishermen and other volunteers deployed a ferry borrowed from the Alaska Marine Highway and protected the hatchery using a "mosquito fleet" of skiffs and fishing vessels.

- * DEC staff, contractors, and local fishermen pioneered

the use of vacuum trucks mounted on barges as an alternative to Exxon skimmers that were unavailable, clogged, or out of service.

* DEC staff put together a computer system to record information about condition and movement of the oil, its location on the shore, and other information. This system is the first one of its kind developed anywhere in the world.

Since mid-December the effort has moved to a new phase: evaluation of the data already gathered in field work, consolidation of information on maps, and preparations for spring and summer 1990.

Spill Response Preparations

Based upon our experience with the Exxon Valdez and other major spills, we have several observations about strengthening spill contingency planning and other response preparations. Many of these are already being implemented; others will be brought on line at the appropriate time.

Incident Command System

We believe the Incident Command System (ICS) can provide the organizational framework for the state's overall spill response effort. ICS methods were developed to provide an efficient, multi-disciplinary command structure as a civilian alternative to military command. The system worked well this summer in communities such as Seward, and the Department's staff were involved directly in those operations. The Incident Command System can be adapted specifically for use in responding to oil and hazardous substance releases. Planning for its use can be accomplished prior to major spill events, and it can be designed to be useful in spills smaller than the Exxon Valdez.

Involvement of Local Communities

The T/V Exxon Valdez spill demonstrated the importance of a role for local officials and other residents in spill response. Plans for spill response should include local governments and other local resources. Residents of areas affected by a spill often have local knowledge and specialized skills that may not be available from other sources. Spill response preparation can be strengthened by laying out ahead of time the role of local authorities, the nature of the working relationships among agencies, and the kind of assistance likely to be needed.

Planning for Solid Waste Disposal and Other Needs

Arrangements for needs associated with response activities should be detailed in the industrial facility's approved oil spill contingency plan and pre-approvals should be initiated. For example, methods for solid waste collection or disposal, including oily solid waste, should be identified in the

contingency plan. Applications for these facilities should be made as part of the contingency planning process, and approvals should be secured ahead of time. This would help prevent conflict between local governments and the responsible party.

Communications, Logistics, and Other Support

Under the Incident Command System, there is an important role for logistics. Preparations for oil spill response should take account of that function and make adequate plans for communications and other logistical services. For example, the Division of Emergency Services and the Department of Administration provided valuable assistance by establishing communications links in Prince William Sound. In preparing for spill response, the State should utilize the existing expertise and resources of state agencies. Delivery of this support can be strengthened by laying out ahead of time the nature of the working relationships and the establishing mutual expectations.

Statewide and Regional Response Preparations

The legislature enacted several pieces of legislation last session that authorize improved spill response preparedness. At tomorrow's committee session, we will report to you on the implementation of those measures.

Oil Spill Contingency Planning Required of Industry

The Department issued emergency orders to Alyeska in April and May requiring immediate actions to increase spill response capability and longer term revisions to the Alyeska oil spill contingency plan for the oil terminal and tankers. Response capacity has been substantially increased. Alyeska has also submitted a new oil spill contingency plan. We have required the company to plan for a likely spill event of no less than 250,000 barrels. The plan is under review, discussions with the company are underway, and public hearings are planned for February.

Cook Inlet is another area that has considerable risk of oil spills and was the site of a major spill from the tanker Glacier Bay in 1987. The Department has initiated a full review of the situation in Cook Inlet, including evaluation of all contingency plans. Working with local governments, fishermen, and the oil and gas industry we are identifying specific steps to strengthen spill response capability. We have established a task force with Kenai Borough officials and other local residents.

Cook Inlet needs an integrated regional spill response capacity. This should be a comprehensive, region wide spill response capability that pulls together the efforts of shippers, producers, and facility operators.

Oil Spill Contingency Plan Reviews

As a starting point in improving the facility contingency plans required of industry, we are negotiating a contract to assist with the review of vessel and facility contingency plans. This effort includes:

- * Recommendations for possible revisions to the contingency plan regulations;

- * Development of guidelines for facility and vessel inspections;

- * Development of Guidelines for spill drills and evaluation of drill performance;

- * Reviewing all contingency plans against the new criteria.

Individual vessel and facility contingency plans are the primary line of defense in a spill. Rigorous plan review is essential, coupled with drills to test actual performance and formal inspections to make sure that the equipment and resources are available and operation. Containment and cleanup resources absolutely must be ready and immediately available. Availability in the lower 48 is not sufficient.

Contingency plan reviews can be more effective if the prevention side of the equation is strengthened. Currently contingency plans focus on response capability and not on preventive aspects such as vessel integrity, navigation aids or vessel monitoring.

The Legislature has taken important steps to strengthen the oil spill program, increasing the funding for the Oil and Hazardous Substances Release Response Fund and authorizing the use of the fund for response preparations. The Governor's FY 91 budget request includes money for oil spill contingency plan review on a continuing basis. State law requires all contingency plans to be reviewed and updated every three years. Along with the Legislature's previous actions, the Governor's request would enable the department to field a full oil spill contingency plan program.

Conclusion

The Exxon Valdez spill teaches many important lessons. Along with prevention measures, spill preparedness and contingency planning are essential elements of protecting Alaskans. We look forward to working with you to ensure that Alaska is ready for future challenges.

ALYESKA PIPELINE SERVICE COMPANY

Remarks of Mike Williams,
Vice President of Environmental
Planning and Control,
Alyeska Pipeline Service Company

before
House Resources Committee
January 17, 1990

Alaska State Legislature

My name is Mike Williams. I am Alyeska Pipeline Service Company's vice president for Environmental Planning and Control, and I wish to take this opportunity to thank the members of the Resources Committee for inviting representatives of Alyeska to testify today. The Oil Spill Commission report makes numerous suggestions that must be evaluated by you in terms of practicality, cost effectiveness and coordination with federal and private roles. During this process you must decide what level of protection from oil spills is desired on a statewide basis and how this protection can be achieved on a cost effective basis. We at Alyeska Pipeline Service Company offer our assistance by explaining prevention and response systems activated this summer. I will also explain our utilization of the Incident Command System in the new Prince William Sound plan.

My testimony today will be brief. James B. Hermiller, President of Alyeska, provided more detailed information to the Alaska Oil Spill Commission. A copy of that written testimony is submitted for your consideration.

Beginning in May, and continuing throughout the summer of 1989, Alyeska developed a Ship Escort and Response Vessel System (SERVS) to attempt to prevent, or mitigate the effect of, oil tanker accidents in the waters of Prince William Sound. The system requires that at least two vessels--one of which must be an escort/response vessel (ERV)--accompany each outbound, laden tanker to Hinchinbrook Entrance. The tugs and ERVs are equipped to tow a crippled tanker. The ERVs have capability to undertake rapid response to any spillage of oil. The system proved its effectiveness when the Atigun Pass lost power and was taken under tow.

Although tankers^l operate independently of Alyeska, we have used compliance with the escort system as a basis for implementing traffic rules for Prince William Sound. These rules, which are attached, require a 10-knot speed limit, require tankers to stay in designated traffic lanes and reduce their speed to the lowest level consistent with safe navigation when necessary, for example, when ice is present.

Initial response to a tanker spill in Prince William Sound will be in three phases: on water, near shore, and on shore response.

Rapid on-water response will be initiated by a trained oil spill supervisor on the escort/response vessel accompanying a tanker. Boom and skimmers on that vessel will be deployed by the escort/response vessel's crew and a Dynamic Skimming Vessel, with 120,000 barrels storage capacity, would be summoned from its anchorage in mid Prince William Sound. Further assistance will come from personnel and equipment stationed in Valdez, including other escort/response vessels, a lightening vessel, tank barges, and two Trans Rec skimmers manufactured in Norway. Over 150 people, at an annual cost of over \$50,000,000, are dedicated to this prevention and response system. However, it must be understood that no amount of equipment and personnel can guarantee recovery of all oil that might be spilled on the water, avoiding contamination of beaches. We agree with the Oil Spill Commission that prevention of spills must receive first priority.

In addition to the escort/response system, Alyeska has assisted in the formation of an interim citizens advisory committee, whose members are citizens and public officials from the communities in Prince William Sound, lower Kenai Peninsula and Kodiak. This committee has acted as a consultative body in the formation of Alyeska's oil spill contingency plan, and will assist in the establishment of priorities for protection of sensitive areas and oversee the creation and maintenance of depots of spill response equipment and material. A long term contract to fund a

permanent Regional Citizen Advisory Committee is expected to be signed this month.

One of the first recommendations Alyeska accepted from the communities was that Alyeska utilize an Incident Command System (ICS) to organize its response in a way that would efficiently coordinate our efforts with those at hatcheries and in local communities utilizing materials and equipment provided by Alyeska, stored throughout the Sound. Today in Anchorage, Alyeska has a team of Alaska and California firefighters instructing some 30 Alyeska employees, plus DEC, Coast Guard officials, and members of the Regional Citizens Advisory Committee, in the organization, structure and operation of the incident command system. Next week in Valdez, Alyeska has scheduled the first major table top drill of the ICS. The Coast Guard, tanker representatives, DEC, and the communities have agreed to participate. I would be happy to report to you at a later date what we learn from that drill.

Alyeska is completing a Tanker Spill Prevention and Contingency Plan for Prince William Sound. The foundation of the plan, the ship escort and response vessel system, was fully activated by mid-July. The initial version of the plan was submitted to the DEC on August 1, 1989. Since then, Alyeska has received and responded to comments on the plan from DEC, federal agencies, and citizens groups, and has focused on completing a risk assessment, which allows us to evaluate the propriety of our

prevention and response efforts and develop new ones where necessary. By the end of this month, Alyeska will submit the final version of the plan to DEC for public review and approval.

Alaska law requires each tanker serving the Valdez trade to have an oil spill contingency plan on file with and approved by the Department of Environmental Conservation. Alyeska's Tanker Spill Prevention and Response plan for Prince William Sound describes Alyeska's initial response to a spill in those waters as a contractor for participating vessels. The plan describes the criteria and process for handover of response from Alyeska to a spiller, in the event it is necessary for a spiller to assume long-term participation in the control of cleanup operations.

During the Exxon Valdez spill, Alyeska provided immediate response -- until Exxon assumed control -- as it was required to do under the terms of both state and federal law, and as was contemplated under the terms of the oil spill contingency plan then in effect. In fact, in 1988, Alyeska, the Coast Guard and Department of Environmental Conservation personnel had practiced such a transfer of responsibility in a drill of a simulated oil spill which involved Arco Shipping Company. Under Alyeska's new tanker plan, tanker owners must explicitly designate Alyeska as a response contractor if those owners wish to have Alyeska serve as their initial responder to an oil spill.

I would like to mention briefly that Alyeska is also engaged with the Department of Natural Resources in a thorough review of its prevention efforts and contingency plan for oil spills from the Trans Alaska Pipeline System, including pump stations and related facilities. The Department of Natural Resources and the federal Bureau of Land Management share the responsibility for oversight and approval of Alyeska's contingency planning for the pipeline. The Department of Environmental Conservation is also participating in this review.

Alyeska wishes to cooperate with your committee and the members of the Legislature in an examination of the Oil Spill Commission report. We urge, in the process of consideration of any new legislation related to oil spills, that the Legislature include comprehensive analysis of federal and state laws which we believe to be essential to effective, fair and responsible legislation.

Alyeska's goal is to determine and meet public expectations for prevention efforts and response capability in Prince William Sound. We feel compelled to remind you that even as Alyeska achieves that goal, you still must resolve difficult issues such as the appropriate role for state government in Prince William Sound spill response and the appropriate blend of federal, state and private efforts in the rest of Alaska. During the next year, enactment and implementation of comprehensive federal

legislation will establish major new components of a national prevention and response system.

For the most part, we at Alyeska believe that existing law provides an adequate framework for the management of oil spills. Implicit in any set of laws and regulations governing spills is preparedness, and we believe that Alyeska's program of drills based on simulated spills is one of the principal ways in which affected state, federal and local governments can develop and maintain response capability.

We urge that DEC and DNR be given the funds necessary to work with the Environmental Protection Agency to insure that the results of research in the technology of spill response is expanded and made more widely available. For example, both state and federal laws provide that only those dispersants, coagulants, or other chemicals which have been approved by EPA may be used. Alyeska and spillers are not legally permitted to utilize substances without such approval.

There may be a number of substances which have been shown to be effective in either dispersing or coagulating spilled oil, but for lack of EPA approval, cannot be used in any future oil spill. We believe that it is very important that research continue, that it be accelerated, and that the approval process used by EPA be improved so that the needed technology will be

available. We believe the State of Alaska is well positioned to encourage the improvement of the approval process.

In conclusion, we again wish to emphasize our interest and desire to cooperate with the Legislature in formulating any measures which are deemed necessary to make the State of Alaska an effective partner in the management of oil spill response.

NOTES FOR PRESENTATION TO ALASKA LEGISLATURE CONCERNING SPILL
RESPONSE AND CONTINGENCY PLANNING

SPILL RESPONSE - WITH REGARD TO SPILL RESPONSE THE COAST GUARD REMAINS THE LEAD FEDERAL AGENCY FOR RESPONSE TO OIL AND HAZARDOUS MATERIAL SPILLS IN THE COASTAL ZONE...THE COAST GUARD CAPTAIN OF THE PORT IN THE DESIGNATED AREAS REMAINS THE PRE-DESIGNATED FEDERAL ON SCENE COORDINATOR FOR THESE TYPE INCIDENTS. THE COAST GUARD ON SCENE COORDINATOR'S DUTIES IN AN OIL SPILL CAN TAKE TWO DIVERGENT PATHS...IF CLEANUP IS NECESSARY AND FEASIBLE AND IF THE POLLUTER IS IDENTIFIED AND IF THE POLLUTER IS TAKING ACTION AND CONDUCTING PROPER REMOVAL THE COAST GUARD ON SCENE COORDINATOR WILL MONITOR REMOVAL UNTIL CLEANUP IS COMPLETE...THE CASE IS CLOSED AND THE APPROPRIATE VIOLATION REPORTS ARE SUBMITTED. IF THE POLLUTER IS UNIDENTIFIED OR IF THE POLLUTER IS IDENTIFIED, BUT NOT TAKING APPROPRIATE ACTION THE COAST GUARD ON SCENE COORDINATOR CAN ASSUME CONTROL OR "FEDERALIZE" A SPILL. IN THIS CASE IT SIMPLY MEANS THAT THE COAST GUARD IS PAYING THE BILLS FOR THE CLEANUP AND DOING ALL OF THE CONTRACTING WORK AND MONITORING THE EFFORTS OF THE FEDERAL CONTRACTORS. IN THIS REGARD, WITH REGARD TO CONTROL OVER THE ACTIVITIES OF THE CONTRACTOR, THE FEDERAL ON SCENE COORDINATOR OR HIS REPRESENTATIVES IN THE FIELD HAVE THE SAY ON WHO DOES WHAT AND HOW THEY DO IT AND WHEN THEY DO IT. IN THE PREVIOUS CASE WHERE THE RESPONSIBLE PARTY IS TAKING THE ACTION THE COAST GUARD STILL HAS CONTROL THROUGH ITS MONITORING ACTIONS. IN OTHER WORDS, IF A RESPONSIBLE PARTY'S CONTRACTOR IS DOING SOMETHING INCORRECTLY OR NOT FAST ENOUGH OR USING IMPROPER TECHNIQUES, THROUGH THE MONITORING ACTION THE COAST GUARD WOULD REQUIRE CORRECTION OF THE IMPROPER ACTIONS. ONCE THE RESPONSIBLE PARTY COMPLETES THE CLEANUP AND THE COAST GUARD FEDERAL ON SCENE COORDINATOR IS SATISFIED THAT THE CLEANUP IS COMPLETE THEN THE REQUIRED VIOLATION REPORTS ARE SUBMITTED AND THE CASE IS CLOSED. AFTER THE EXXON VALDEZ OIL SPILL THERE WERE MANY SUGGESTIONS MADE AS TO MAKING CHANGES IN THIS BASIC CONCEPT FOR CONTROL OF AN OIL SPILL CLEANUP. THERE WERE SUGGESTIONS MADE THAT THE COAST GUARD SHOULD BE PUT IN CHARGE OF ALL OIL SPILLS IMMEDIATELY AND THEN THERE WAS THE SUGGESTION THAT THE COAST GUARD SHOULD TAKE CHARGE OF ALL OIL SPILLS OVER A CERTAIN SIZE IMMEDIATELY. SOME OF THESE SUGGESTIONS ARE IN THE FORM OF PROPOSED FEDERAL LEGISLATION AND THE STATUS OF THESE BILLS IS AS OF YET UNRESOLVED.

OTHER FEDERAL ASSISTANCE TO THE ON SCENE COORDINATOR - WHEN AN OIL SPILL OCCURS THE COAST GUARD PRE DESIGNATED FEDERAL ON SCENE COORDINATOR IS NOT LEFT ALONE TO HANDLE THE SPILL JUST WITH HIS OWN RESOURCES. HE HAS HELP IN THE FORM OF WHAT WE CALL SPECIAL TEAMS. THESE TEAMS CONSIST OF THE COAST GUARD NATIONAL STRIKE FORCE OR STRIKE TEAM. THERE ARE TWO STRIKE TEAMS NOW IN EXISTENCE - ONE IN MOBILE, ALABAMA AND ONE LOCATED AT HAMILTON AIR FORCE BASE IN NORTHERN CALIFORNIA NEAR SAN FRANCISCO. THE STRIKE TEAMS HAVE NUMEROUS PIECES OF POLLUTION ABATEMENT GEAR IN THEIR INVENTORIES INCLUDING BOOM, SKIMMERS AND PORTABLE PUMPING EQUIPMENT. COAST GUARD PUMPING EQUIPMENT WAS USED IN THE OFFLOADING OF THE CARGO FROM THE EXXON VALDEZ AND OTHER BOOM AND

OTHER STRIKE TEAM EQUIPMENT AND PERSONNEL WERE USED EXTENSIVELY DURING THE EXXON VALDEZ OIL SPILL RESPONSE. THERE ARE ALSO EMERGENCY RESPONSE TEAMS AVAILABLE FROM THE ENVIRONMENTAL PROTECTION AGENCY. THESE TEAMS HAVE EXPERTS IN WATER QUALITY AND AIR MONITORING AND CAN BE OF VALUABLE ASSISTANCE TO AN ON SCENE COORDINATOR ESPECIALLY IN THE EVENT OF A HAZARDOUS CHEMICAL RELEASE. THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION UNDER THEIR NOAA HAZMAT PROGRAM IN THE EVENT OF AN OIL SPILL OR HAZARDOUS CHEMICAL RELEASE CAN AND DO ROUTINELY PROVIDE OFFICERS TO COME AND SERVE ON THE OSC'S STAFF AND WHO ACT AS SCIENTIFIC SUPPORT COORDINATORS. THESE PEOPLE ARE EXTREMELY VALUABLE AS THEY CAN ASSIMILATE SCIENTIFIC DATA AND ADVISE THE OSC ON THE VIABILITY OF CERTAIN CLEANUP TECHNIQUES FOR DIFFERENT TYPES OF SHORELINES. THE NOAA COMPUTERS ARE USED FOR SPILL TRAJECTORY FORECASTING TO PREDICT WHERE SPILL OIL WILL BE TRAVELING SO THAT SHORELINE PROTECTION STRATEGIES CAN BE EVOLVED. NOAA ALSO CAN PROVIDE INFORMATION CONCERNING RESOURCES AT RISK AND PRIORITIES FOR THEIR PROTECTION.

NATIONAL RESPONSE MECHANISM - THERE IS A DOCUMENT KNOWN AS THE NATIONAL CONTINGENCY PLAN WHICH GENERALLY LAYS OUT A PLAN FOR COORDINATED ACTION AMONGST FEDERAL AGENCIES. THERE IS A NATIONAL RESPONSE TEAM WHICH MEETS IN WASHINGTON DC AND CONSISTS OF THE DEPARTMENT OF AGRICULTURE, THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION, THE DEPARTMENT OF DEFENSE, THE DEPARTMENT OF ENERGY, HEALTH AND HUMAN SERVICES, THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE DEPARTMENT OF THE INTERIOR, THE DEPARTMENT OF JUSTICE, THE DEPARTMENT OF LABOR, THE DEPARTMENT OF STATE, THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. THE NATIONAL RESPONSE TEAM IS CO-CHAIRLED BY THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. ON THE NATIONAL LEVEL THE NATIONAL RESPONSE TEAM FUNCTIONS MOSTLY AS A POLICY MAKING BODY FOR PLANNING AND COORDINATION. ON THE REGIONAL LEVEL WE HAVE AN ALASKA REGIONAL RESPONSE TEAM. THIS IS ALSO CO-CHAIRLED BY THE COAST GUARD AND THE ENVIRONMENTAL PROTECTION AGENCY. ON A REGIONAL LEVEL THE ALASKA REGIONAL RESPONSE TEAM IS VERY ACTIVE IN CONTINGENCY PLANNING. AN EXAMPLE OF THIS IS THE DISPERSANT USE GUIDELINES WHICH THE ALASKA REGIONAL RESPONSE TEAM HAS IN PLACE FOR COOK INLET AND PRINCE WILLIAM SOUND. THE ALASKA REGIONAL RESPONSE TEAM MAINTAINS AN ACTIVE DISPERSANT WORKING GROUP WHICH IS PRESENTLY INVOLVED IN DEVELOPING GUIDELINES FOR PRE-PERMITTING FOR THE USE OF IN SITU BURNING. THE REGIONAL RESPONSE TEAM IS ALSO DEEPLY INVOLVED IN WILDLIFE PROTECTION GUIDELINES AND GUIDELINES AND ANNEXES TO BE INCLUDED IN ALASKA'S REGIONAL PLANS FOR THE USE OF VOLUNTEERS FOR OIL SPILL CLEANUP.

CONTINGENCY PLANNING - CONTINGENCY PLANNING IS A VITAL PIECE OF THE PICTURE AS IT RELATES TO OIL SPILL RESPONSE. THE COAST GUARD FEDERAL ON SCENE COORDINATORS MAINTAIN CONTINGENCY PLANS FOR THEIR AREAS OF RESPONSIBILITY. THESE PLANS CONTAIN INFORMATION ON THE GEOGRAPHIC AREA, RESOURCES AT RISK, NOTIFICATION LISTS OF PERSONNEL AND AGENCIES TO BE CONTACTED AND WHO TO WORK WITH IF A SPILL OCCURS IN A PARTICULAR AREA. THE PLANS CONTAIN INFORMATION ON WHAT EQUIPMENT IS AVAILABLE FROM VARIOUS OIL SPILL CLEANUP

COOPERATIVES WHICH MAY BE OPERATING IN THE AREA AND HOW TO ACCESS THAT EQUIPMENT. AS A RESULT OF THE EXXON VALDEZ SPILL THE PRESIDENT DIRECTED THAT A NATIONWIDE REVIEW OF CONTINGENCY PLANS BE UNDERTAKEN. THE REVIEW WAS TO BE MADE WITH THE ON SCENE COORDINATORS TAKING INTO ACCOUNT THE WORST CASE SCENARIOS WHICH COULD OCCUR IN THEIR AREAS AND THE ON SCENE COORDINATORS WERE ASKED TO COME UP WITH PERSONNEL AND EQUIPMENT SHORTFALLS WHICH THEY COULD SEE WOULD ARISE IF THEY HAD TO RESPOND TO THAT WORST CASE SCENARIO. THE ALASKA CONTINGENCY PLANS FOR THE COAST GUARD HAVE BEEN REVISED AND REVIEWED BY MEMBERS OF THE ALASKA REGIONAL RESPONSE TEAM. THE SHORTFALLS HAVE BEEN PROVIDED TO THE NATIONAL RESPONSE TEAM. A SIX MONTH CONTINGENCY PLANNING STUDY REQUIRED BY THE PRESIDENT HAS BEEN COMPLETED BY THE NATIONAL RESPONSE TEAM AND THIS DOCUMENT SHOULD BE PUBLISHED FOR THE CONSUMPTION OF THE GENERAL PUBLIC SHORTLY. AND A FINAL WORD ON CONTINGENCY PLANNING IS THAT THE NEED FOR GOOD CONTINGENCY PLANS DOES NOT PERTAIN ONLY TO THE FEDERAL RESPONSE MECHANISM. INDUSTRY CONTINGENCY PLANS ARE MORE VITAL TO THIS PROCESS THAN ANY GOVERNMENT PLAN BE IT STATE OR FEDERAL. BY MAKING EQUIPMENT REQUIREMENTS AN INTEGRAL PART OF THE INDUSTRY PLANS WE FEEL THAT THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION IS VERY MUCH ON THE RIGHT TRACK IN THEIR RECENT INITIATIVES ON FACILITY CONTINGENCY PLANNING.

SPILLS OF NATIONAL SIGNIFICANCE - THE EXXON VALDEZ OIL SPILL COINED A NEW PHRASE IN THE LEXICON OF OIL SPILL CLEANUP RESPONSE - THAT IS A SPILL OF NATIONAL SIGNIFICANCE. THE COAST GUARD AND EPA AND THE NATIONAL RESPONSE TEAM ARE EXAMINING THE NATIONAL POSTURE OF THE NATIONAL RESPONSE MECHANISM TO SEE WHAT CHANGES, IF ANY, ARE REQUIRED TO DEAL WITH SPILLS OF NATIONAL SIGNIFICANCE. WE HAVEN'T SEEN ANYTHING CONCRETE COME OUT ON THAT YET, BUT WE CAN VISUALIZE A PRE-PLANNED RESPONSE ORGANIZATION, A WATCH QUARTER AND STATION BILL, IF YOU WILL, THAT ADDRESSES THE TYPE AND FORM AND PERSONNEL NEEDS THE COAST GUARD WOULD DEEM NECESSARY TO RESPOND AGAIN TO A NATIONALLY SIGNIFICANT EVENT.

INCIDENT COMMAND SYSTEM (ICS)

There are three very important components in the fire suppression organization system (ICS) which allows all agencies to interchange forces and effect a positive managerial and operational control of the suppression and support activities. This system has vastly improved the efficiency and effectiveness of all the nation's forest fire suppression efforts. It is especially effective in Alaska where such a large area is protected by only a few fire forces and dependency or interagency force sharing is critical.

ORGANIZATION STRUCTURE:

A standard organization structure identifies positions which are specific to various duties and identifies those job responsibilities each position will perform in the organization. The structure utilizes an Incident Commander as the person in charge and a staff of section chiefs for Operations (actual on line fire fighting), Plans (information and planning), Service (all logistical support), Finance (cost accounting) and Safety (assures operations are safe).

There are many subsequent positions ranging from aircraft managers and fire behavior analysts to the actual fire fighter.

This system is effective for emergencies such as floods, earthquakes, fires or other disasters.

TRAINING

A curriculum of courses, which prepares the employees for specific jobs in the Incident Command System organization, blends experience with formal training in order to qualify for the position. The courses are structured to be presented in individual sessions ranging from one day to two weeks, depending on complexity. The basic criteria in each course is standard nationwide with adjustments made for local area special situations.

CERTIFICATION

The training courses, experience, physical fitness and actual performance are evaluated by management. Once the qualifications are determined, each individual is issued a certification card which indicates what jobs can be performed, nationwide. The employees carry the card as validation of their qualifications. During interagency mobilization of forces, the receiving agency used this as valid confirmation of the individuals qualification. A manual for the ICS system is available upon request.

CAREER LADDER TO INCIDENT COMMANDER/AREA COMMAND

YEAR	COURSES	HOURS	INCIDENT COMMAND SYSTEM POSITION
	I-620	40	Incident Commander/Area Command
15	I-520	80	Incident Commander/Multi-Branch
14			Incident Commander/Multi-Division
13	I-400, I-420	64	Incident Commander/Multi-Leader
12			Planning Section Chief/Multi-Division
11			Logistics Section Chief/Multi-Division
10	I-430	40	Operations Section Chief/Multi-Leader
	I-440	32	Planning Section Chief/Multi-Leader
	I-450	36	Logistics Section Chief/Multi-Leader
9	I-354	28	Facilities Unit Leader
	I-355, I-255	28	Ground Support Unit Leader
	I-356, I-252, I-253	40	Supply Unit Leader
8	I-348	24	Resources Unit Leader
	I-346	6	Situations Unit Leader
	I-244	32	Field Observer
	I-248	8	Status Check-In Recorder
7	I-470	40	Air Operations Branch Director
	I-378, I-376, I-374	96	Air Attack Group Supervisor
	I-375	32	Air Support Group Supervisor
6	I-271	34	Helibase Manager
	I-272	8	Helispot Manager
5	I-339	10	Division/Group Supervisor
4	I-330, I-220	54	Strike Team Leader
	I-390	36	Single Resource Boss
3	S-230, S-260, S-270	56	Crew Boss
2	S-110, S-111, S-112	56	Squad Boss
1	S-130, S-190	44	Fire Fighter
15 yrs	36 classes	924 hrs	27 Positions

NIIMS SUMMARY

100 training courses

2,220 course hours

96 positions

18 special Alaska positions

LARGE OIL SPILLS

NO.	DATE	SPILL	LOCATION	VOLUME	REF.
				Thousand bbl	
1	Jun79-Mar 80	Ixtoc I, Well Blowout	Mexico	3,300-10,200*	abgh
2	Feb-Dec., 83	Nowruz Oil Field, Well Blowout(s)	Persian Gulf	1,900-4,400	ab
3	Aug. 6, 83	CASTILLO DE BELLVER/Broke, Fire	South Africa	1,200-1,900*	abe
4	Mar. 16, 78	AMOCO CADIZ, Grounding	France	1,600-1,800	abfhm
5	July 19, 79	AEGEAN CAPTAIN/ATLANTIC EMPRESS	off Tobago	1,162*	abl
6	Aug80-Jan 81	D-103 Libya, Well Blowout	Libya	1,000	a
7	Aug. 2, 79	ATLANTIC EMPRESS, Fire	Barbados	988*	abl
8	Mar. 18, 67	TORREY CANYON, Grounding	England	850-920*	bcf
9	Feb. 23, 80	IRENES SERENADE, Fire	Greece	292-871*	am
10	Dec. 19, 72	SEA STAR, Collision, Fire	Gulf of Oman	840*	bf
11	Aug. 20, 81	Kuwait Nat'l Petrol. Tank	Kuwait	743	a
12	May 12, 76	URQUIOLA, Grounding	Spain	642-730*	bf
13	Mar. 20, 70	OTHELLO, Collision	Sweden	438-730	bcf
14	Feb. 25, 77	HAWAIIAN PATRIOT, Fire	N Pacific	723*	bf
15	Nov. 15, 79	INDEPENDENCE	Turkey	688	a
16	May 25, 78	No. 126 Well/Pipe	Iran	667	a
17	Jan. 29, 75	JAKOB MAERSK	Portugal	595*	f
18	July 6, 85	BP Storage Tank	Nigeria	569	a
19	Aug-Oct., 85	THE NOVA, Kharg Island	Iran	510	a
20	Dec. 11, 78	BP, Shell Fuel Dept	Zimbabwe	476	a
21	Feb. 27, 71	WAFRA	South Africa	467*	cf
22	Aug. 9, 74	METULA, Strait of Magellan	Chile	380	cf
23	Jan. 7, 83	ASSIMI, Fire	off Oman	376*	a
24	May 5, 70	POLYCOMMANDER	Spain	73-365	c
25	June 12, 78	Tohoku Storage Tank - Earthquake	Japan	357	a
26	Dec. 31, 78	ANDROS PATRIA	Spain	348	a
27	Dec. 10, 83	PERACLES GC	Qatar	333	a
28	Nov. 6, 85	Ranger, TX, Well Blowout	Texas	150-326	bk
29	June 13, 68	WORLD GLORY, Hull Failure	South Africa	322	bcf
30	June 1, 70	ENNERDALE, Struck Granite	Seychelles	299	cf
31	Dec. 18, 74	Mizushima Refinery, Oil Tank Rupture	Japan	270	cdf
32	June 14, 73	NAPIER	SE Pacific	263*	f
33	Dec. 29, 80	JUAN A. LAVALLEJA	Algeria	262	a
34	Mar. 24, 89	EXXON VALDEZ, Grounding	Alaska	258	i
35	Oct. 19, 78	Turkish Petroleum Corp.	Turkey	255	a
36	Nov. 1, 79	BURMAH AGATE, Collision, Fire	Texas	31-255*	abo
37	Mar. 27, 71	TEXACO OKLAHOMA, 120 mi offsh.	North Carolina	220-255	cf
38	June 11, 72	TRADER	Mediterranean	248	f
39	Feb. 4, 76	ST. PETER	SE Pacific	248	f
40	Jan. 18, 77	IRENE'S CHALLENGE	Pacific	248	f
41	Jan. 28, 72	GOLDEN DRAKE	NW Atlantic	226	f
42	Dec. 28, 70	CHRYSSI	NW Atlantic	226	f
43	Nov. 25, 69	PACOCEAN, Broke in two	NW Pacific	219	f
44	May 27, 77	CARIBBEAN SEA	E Pacific	219	f
45	Dec. 30, 76	GRAND ZENITH, Disappearance	NW Atlantic	212	f
46	July 28, 76	CRETAN STAR	Indian Ocean	212	f
47	Nov. 5, 69	KEO, Hull Failure	Massachusetts	210	bf
48	Nov. 4, 69	Storage Tank, Sewaren, NJ	New Jersey	200	b
49	Apr. 22, 77	Ekofisk Bravo, Well Blowout	North Sea	110-195	bf
50	Apr. 1, 72	GIUSEPPI GUILIETTI	NE Atlantic	190	f
51	Dec. 16, 77	VENPET and VENOIL, Collision	South Africa	175-190	ef
52	Dec. 15, 76	ARGO MERCHANT, Grounding	Massachusetts	183	bhf
53	Oct. 15, 67	Humble Oil Pipeline, Offshore Leak	Louisiana	160	n
54	Dec. 21, 73	JAWACTA	Baltic Sea	146	c
55	Sept. 3, 67	R. C. STONER	Wake Island	143	c
56	Nov. 7, 70	MARLENA	Sicily	102	c
57	Apr. 20, 70	Pipeline, NW shore Tarut Bay	Saudi Arabia	100	c
58	Dec. 2, 71	Oil Well, 80 mi SW Laban	Persian Gulf	100	c
59	Mar. 7, 80	TANIO, Broke Amidships	France	99	j
60	Jan. 2, 88	Ashland Storage Tank, Rupture	Pennsylvania	90	b
61	Jan-Oct., 69	Santa Barbara Channel, Well Blowout	California	33-80	dfp
62	Feb. 4, 70	ARROYO, Grounding	Nova Scotia	36-73	ch
63	Nov. 13, 70	Storage Tank, Schuylkill River	Pennsylvania	71	c
64	July 30, 84	ALVENUS, Grounding	Louisiana	67	b
65	Mar. 10, 70	Offshore Platform, Well Blowout	Louisiana	65	c

a. A List of the 20...., 1989

b. Reuters, 1989

c. Van Gelder-Ottway..., 1976

d. A Basic Spill..., 1981

e. Lord et al., 1987

f. Butler, 1978

g. Woods and Hannah, 1981

h. Teal and Howarth, 1984

i. Caleb Brett, 1989

j. Ganten, 1985

k. Quina et al., 1987

l. Horn and Neil, 1981

m. Bao-Kang, 1987

n. Tracey, 1988

o. Ocean Industry, 1980

p. NRC, 1975

Conversion Factors—7.3 bbl/ton; 4.2 gal/bbl

Tanker spills from the Iran/Iraq war were not generally available.

* Fire burned part of spill

INCIDENT COMMAND

**MULTI AGENCY COORD. GRP.
AUTHORITIES
REPRESENTATIVES**

provides authority to merge
agency actions

INCIDENT COMMANDER

oversees all activities

COMMAND STAFF
=INFORMATION
=LIAISON
=SAFETY

PLANNING

strategic and tactical plans

LOGISTICS

on-scene logistical needs

OPERATIONS

technical and managerial direction to
all on-scene actions, specialized.

FINANCE

financial records and actions

positions filled with QUALIFIED personnel

MANAGEMENT OPTIONS

MULTI-AGENCY COORDINATING GROUP

M A C

the combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordination of assisting agency resources and support to agency emergency operations.

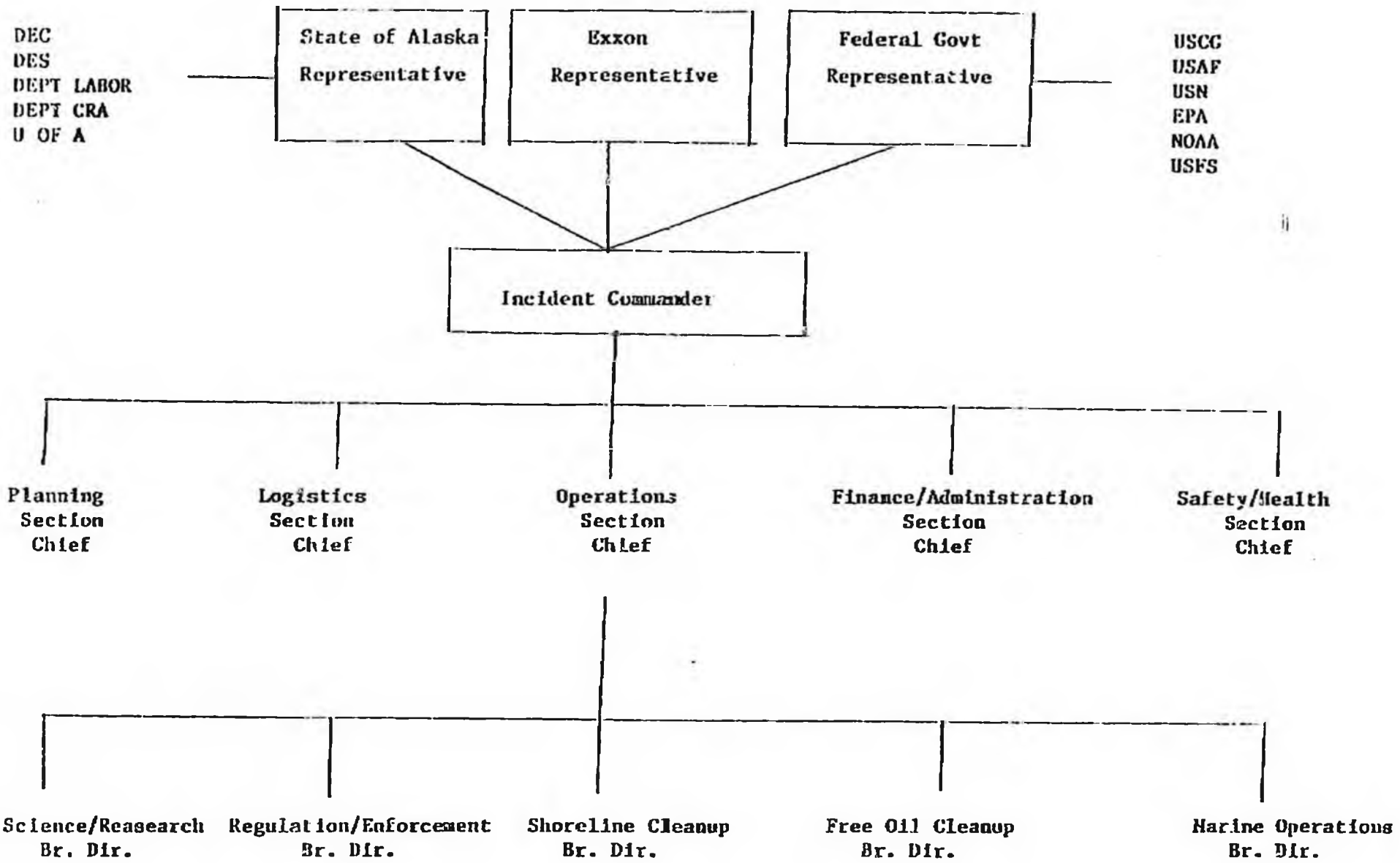
STRATEGY

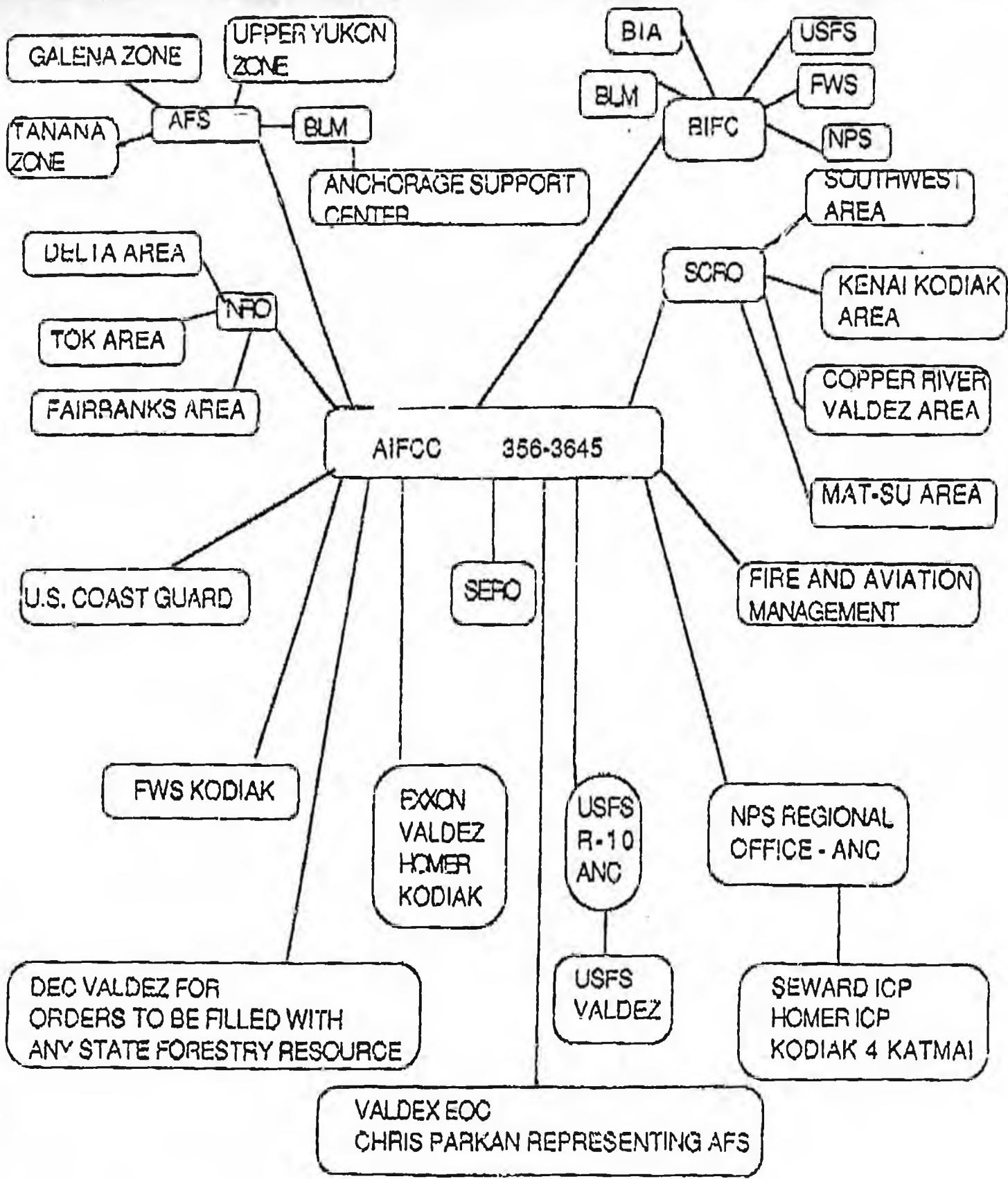
UNIFIED COMMAND

a method for all agencies or individuals who have jurisdictional responsibility, and in some cases, those who have functional responsibility at the incident, to contribute to:

- determining overall objectives
- selection of strategy

TACTICS





OIL SPILL ORDER FLOW
 AIFCC IS PROCESSING ORDERS FOR MANPOWER,
 SUPPLIES, EQUIPMENT AND AIRCRAFT