# PRINCE WILLIAM SOUND AREA CONTINGENCY PLAN

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# APPROVAL LETTER

[Insert text of approval letter, to be signed by FOSC & SOSC]

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# LETTER OF TRANSMITTAL

[Insert text of approval letter, to be signed by FOSC & SOSC, if appropriate]

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## **RECORD OF CHANGES**

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#### 1000 - INTRODUCTION

#### 1100 - INTRODUCTION/AUTHORITY

This Prince William Sound Area Contingency Plan (PWS ACP) represents a coordinated and cooperative effort by government agencies. This document contains information applicable to pollution response within the Prince William Sound Captain of the Port (COTP) coastal zone. The U.S. Coast Guard (USCG) and the Alaska Department of Environmental Conservation (ADEC) have written this area contingency plan jointly. It meets the pollution response contingency planning requirements under the National Contingency Plan (NCP) and the Alaska Regional Contingency Plan (RCP) applicable to the State and Federal government.

Geographic Response Strategies (GRS) are found in <u>Section 9740</u> of this document and are organized by geographic zone, as defined later in this document. GRS provide response strategies for the protection of selected sensitive areas to aid first responders at an oil spill. The strategies serve as guidance to the federal and state on-scene coordinators during an oil spill in the area covered by the GRS. They can save time during the critical first few hours of an oil spill response by showing responders where sensitive areas are located and where to place oil spill protection resources. The GRS are a valued aid in preplanning for a spill response and can provide excellent guidance during a spill response, but are not mandates for specific action at the time of a spill.

Industry's facility and vessel response/contingency plans provide specific data regarding the Responsible Party's (RP) containment, control and cleanup actions. Local Emergency Response Plans (LERPs, also known as Emergency Operations Plans, or EOPs) provide information regarding resources and emergency actions at the local, community level. The Regional Contingency Plan, Area Contingency Plans, LERPs, and industry plans are all critical elements of the coordinated Federal/State/Local and RP response effort to an oil or hazardous substance discharge/release.

The Figure 1-1 illustrates the interrelationship and integration of local, state and federal planning efforts.

This Area Contingency Plan describes the strategy for a coordinated Federal, State, and local response to a discharge, or substantial threat of discharge of oil and/or a release of a hazardous substance from a vessel or on/offshore facility operating within Alaska's boundaries and surrounding waters (Reference Section 1200 for specific descriptions of these boundaries). This plan addresses responses to an average most probable discharge, a maximum most probable discharge, and a worst-case discharge, including discharges from fire or explosion. Planning for these three scenarios covers the expected range of spills likely to occur in Prince William Sound. Hazardous materials response scenarios are also included, where appropriate.

For purposes of this plan, the average most probable discharge is the size of an average spill in the area based on historical data. The maximum most probable discharge is also based on historical spill data, and is the size of the discharge most likely to occur, taking into account: the size of the largest recorded spill, traffic flow through the area, hazard assessment, risk assessment, seasonal considerations, spill histories, and operating records of facilities and vessels in the area. The worst-case discharge for a vessel is a discharge of its entire cargo in adverse weather conditions. The worst-case discharge for an offshore or onshore facility is the largest foreseeable discharge in adverse weather conditions. These scenarios are referenced in Section 9440.

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#### FIGURE 1-1: INTEGRATED CONTINGENCY PLANNING

# National Contingency Plan

# Alaska Regional Contingency Plan

Inland Alaska Area Plan Southeast Alaska Area Plan Prince William
Sound Area
Plan

Arctic and Western Alaska Area Plan

# Local Emergency Response Plans

Prepared by Emergency Planning Committees (Reviewed by the State Emergency Response Commission)

Local Government Plans

Hazard Analyses

State/Local

Industry Response Plans (VRP/FRP)

Oil Production, Exploration, Transportation, Distribution and Storage Reports

Natural Resource Studies/Surveys on Sensitive Areas

Coop Resources and Information

Existing Studies/Survevs State Emergency Operations Plan Joint Alaska/Federal Natural Disaster Response Plan

Area Committees are spill preparedness and planning bodies made of Federal, State, and Local agency representatives, as well as tribal representatives and stakeholders. Further guidance on Area Committees is located in the Alaska Regional Contingency Plan and Section 1300 of this plan.

This plan shall be used as a framework for response mechanisms to evaluate shortfalls and weaknesses in the response structure before an incident. Consistency reviews should address, at a minimum, the quality and quantity of Federal, State, local and industry response equipment within the state, available response personnel, protective strategies, and personnel needs compared to those required.

Further information on government contingency planning requirements and authority can be found within the Alaska Regional Contingency Plan.

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#### 1200 - GEOGRAPHIC BOUNDARIES

#### 1210 - Geographic Planning Boundaries

The PWS Area boundaries follow the PWS Captain of the Port (COTP) Zone and FOSC area of responsibility for the U.S. Coast Guard (USCG). The PWS Area is comprised of the Coastal Zone from Cape Puget at 148 26' W longitude eastward to Poul Creek at 142 00' W and seaward to outermost boundary of the EEZ and In accordance with current Memorandum of Understanding with the EPA, the Coastal Zone encompasses all navigable waters seaward of the mean high tide line and an area of shoreline 1,000 yards inland of the coastline and includes the Lowe River from Port Valdez to Thompson Pass.

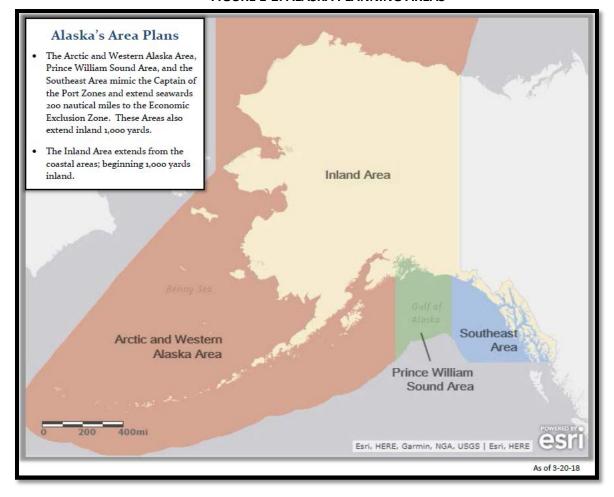


FIGURE 1-2: ALASKA PLANNING AREAS

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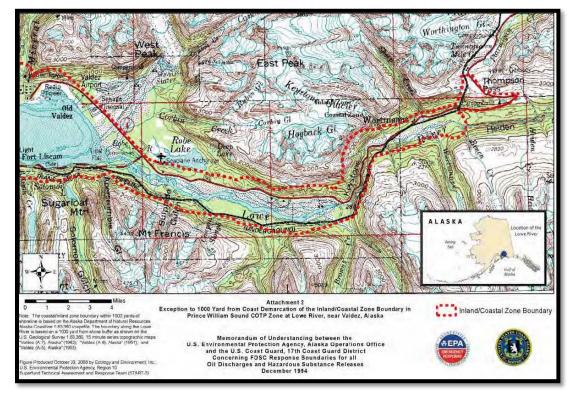


FIGURE 1-3: EPA/USCG MOU LOWE RIVER BOUNDARY

Prince William Sound (PWS) is an extensive body of water covering an area of approximately 2,500 square miles with 3,500 miles of shoreline. The entrance to the Sound is 58 miles across and extends from Cape Puget to Point Whitshed. The entrance is protected by a series of islands: Montague (which experienced as much as 35 feet of uplift during the 1964 earthquake), Hinchinbrook, and Hawkins. Most of the islands and peninsulas are tree-covered with rocky and sometimes precipitous shorelines. Located next to the entrance on the eastern part of the Sound is the Copper River Delta which has extensive tidal flats that support a variety of wildlife which is are important to the PWS ecosystem.

The Prince William Sound region is characterized by isolated coastal and inland communities. Valdez, Whittier and Cordova are the major communities along the coastline. The Glenn, Richardson, and Edgerton Highways transect the region. Several coastal communities including Valdez and Whittier are connected to the interior highway network, which provides transportation routes to the larger communities of Fairbanks and Anchorage.

The city of Valdez is located at the northeastern end of Port Valdez, a body of water approximately 12 miles long and 2.5 miles wide, located in northeast Prince William Sound. The Port is a natural deep water fjord, virtually surrounded by mountains, and the most northerly ice-free port in North America. From Port Valdez the water route proceeds southwest through Valdez Narrows to Valdez Arm and into Prince William Sound. The shoreline is dominated by steeply-inclined rock walls with occasional sloping, rocky beaches and gravel deltas.

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Extensive sand-silt-rock tidal flats are found east of Valdez at the mouths of the Lowe River and Valdez Glacier outflow stream and west of Valdez at the mouth of Mineral Creek. The Port Valdez has a maximum depth of 810 feet, a shallow sill of 390 feet, and an average depth of 675 feet. Tidal currents within the port are not strong, generally less than .75 knots. Wind-driven currents dominate surface movement during high wind periods but waves rarely exceed 3 feet.

The city of Cordova sits on the east side of Orca Inlet and is located in southeast Prince William Sound. Mount Eyak and Mount Eccles, the two most prominent visual features, sit directly above the town. Due to the 1964 earthquake, Orca Inlet experienced as much as 6.3 feet of uplift. The average flood tide is approximately 1.8 knots and the average ebbtide is approximately 1.0 knot.

The town of Whittier, located at the end of Passage Canal, a fjord on the northwestern side of Prince William Sound, has rail and highway connections to Anchorage and beyond. The port serves as one of the major ocean vessel-railroad transfer points for the State of Alaska, a regular embarkation/debarkation point for cruise ship and ferry traffic, and the primary access point for Anchorage-based recreational boaters entering Prince William Sound.

Industrial facilities within the area include the Trans Alaska Pipeline system (TAPS) and its Marine Terminal located in Valdez and several seafood processing facilities, primarily in Cordova and Valdez.

The area encompasses a very diverse array of topographical features, including a large archipelago with numerous small, uninhabited islands; steep-sided fjords; rocky or boulder-strewn shorelines; pebble and gravel pocket-beaches; areas of substantial forests; extremely mountainous terrain; tundra; extensive ice fields; numerous tidewater and piedmont glaciers; river deltas and broad tidal mudflats; and fields of muskeg.

The region supports a wide range of wildlife. Larger, terrestrial mammals include moose, Sitka deer, caribou, brown and black bears, wolf, coyote, fox, wolverine, lynx, Dall sheep, and mountain goat. Smaller mammals include beaver, hare, lemming, marmot, marten, mink, muskrat, pika, porcupine, river otter, shrew, squirrel, vole, and weasel. Marine mammals found in the PWS Area include humpback whale, orca, porpoise, sea lion, harbor seal, and sea otter.

Many songbirds, shorebirds and waterfowl reside in the region or stay as seasonal residents. During the spring and fall, the inland and shoreline areas become a haven for migratory waterfowl and other birds. This is especially true for larger river deltas, such as the massive one at the Copper River, which sees one of the larger influxes of migratory birds in North America.

Some residents engage in a subsistence lifestyle and have long depended upon the availability of plant and animal resources in the area. Any spill of significance, especially coastal, could devastate the subsistence food harvest and seriously threaten the normal means of existence for many residents. Long-term impacts to these food resources could have a deleterious effect on Native and subsistence lifestyles. The Sensitive Areas Section provides detailed information on the specific resources vulnerable to spills and the locations of these resources within the area.

Commercial and sport fisheries play an important part in the lives and the economies of the PWS coastal communities. Dolly Varden, trout, halibut, herring, lingcod, and the five species of salmon are among the many fish sought from the waters in and around PWS. The Prince William Sound Aquaculture Corporation operates five hatcheries that produce hatchery-born, ocean-raised wild salmon for the commercial, sport,

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personal use, and subsistence fisheries in the PWS and Copper River regions. The mariculture industry is growing in size and importance, and the shellfish/aquatic plants being raised in Alaska include Pacific oysters, blue mussels, littleneck clams, scallops, bull kelp, and Porphyra species of red/brown algae. (Note: Alaska Statute prohibits finfish farming.) This biologically rich and diverse maritime region sees significant vessel traffic ranging from pleasure craft and fishing boats to huge, crude oil tankers, container barges, and large cruise ships. Marine-related petroleum products pose an everyday threat of spill and possible pollution to a largely pristine environment.

The general surface circulation pattern in PWS is predominantly counter-clockwise, with inflow to the Sound through the east side of Hinchinbrook Island and out flow through Montague Strait and other western passes. Outside the Sound, the coastal circulation is driven by the Alaska Coastal Current which flows along the outer coast in an east to west direction. The position of Kayak Island disturbs this flow creating eddies along the outer passes of the Sound. Freshwater input from the large Copper River system strengthens the westward flow of the Coastal Current with a portion of that flow entering the Sound. The Sounds many fjords and embayments tend to have a surface outflow with an inflow at depth. Wind blowing into a bay can reverse the circulation with water moving into the bay on the surface and out of the bay at depth. The length of time for water exchange in longer fjords has not been established.

The mixed marine layer depth within the shallower, more protected areas of the Sound is generally within the top ten meters of the surface. Seasonal changes in solar heating, freshwater input, and wind speed can alter the depths of the marine mixing layer throughout the Sound. Areas with greater freshwater input and less fetch tend to have shallower mixed marine layers when summer solar heating combined with freshwater from rain, snow and ice melt can shoal the surface mixed layer to a depth of less than 5 meters. Fall and winter storms can increase the mixed layer depth to greater than 20 meters in regions with large fetch, such as the central portion of the Sound.

The seasonal changes in winds (See Figure 6) and freshwater input also alter surface water circulation. Wind forcing can disrupt the circulation and, at times, reverse it. In winter, the circulation is normally driven by the easterly and northerly winds which tend to push the surface flow in a southwest direction out of the Sound. In the spring, there is evidence of a weak clockwise circulation in the central basin with a weak counter-clockwise flow in the eastern Sound. In the summer, the circulation in the central basin of PWS is counter-clockwise. With increased precipitation in the fall, the circulation of PWS strengthens to a predominant outflow through both the Montague Strait and Hinchinbrook Entrance. (See Figure 5.)

Tidal currents are strong in the central basin and tend to be oriented in a north-south direction. To the east, at the entrance of Orca Inlet, the tidal currents become smaller (weaker tidal flow) with a clockwise rotation over a tidal cycle. To the west, there is little tendency for tidal rotation. The strongest tidal currents are found in the entrances where the water flow is restricted. Most often the tidal currents are less than a knot; however, at times the tidal current can exceed two knots. The United States Coast Pilot 9 can be referenced and provide more specific information. Weekly updates to the 2013 (31st Edition) can be found at <a href="https://nauticalcharts.noaa.gov/publications/coast-pilot/index.html">https://nauticalcharts.noaa.gov/publications/coast-pilot/index.html</a>

#### <u>1220 – Geographic Response Boundaries</u>

#### 1220.1–USCG-EPA Response Jurisdictional Boundary

An existing MOU between the USCG Seventeenth District and EPA formally establishes the emergency response boundaries for USCG and EPA FOSCs. A copy of this MOU can be found in the Regional Contingency

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Plan. Per the MOU and the National Contingency Plan, the "coastal zone" is defined as "all United States waters subject to the tide and all land surface or land substrata, and ground waters, 1000 yards inland."

#### **Coastal Zone FOSC Boundaries:**

Captain of the Port (COTP) Southeast Alaska (Commander, Sector Juneau, Alaska) is the pre-designated FOSC for the coastal waters of Southeastern Alaska. This area is southeast of a straight boundary line, which starts at 60° 1.3" North latitude, 142° West longitude, and thence proceeds northeasterly to its end at the international boundary between the United States and Canada at 60° 18.7" North latitude, 141° West longitude.

COTP Prince William Sound (Commander, Marine Safety Unit (MSU), Valdez, Alaska) is the pre-designated FOSC for the coastal waters of Southcentral Alaska. This area falls within the following boundary line: a line which starts at Cape Puget; thence northerly to a latitude 61° 30" North, longitude 148° 26" West; thence easterly to the international boundary between the United States and Canada; thence southerly along the international boundary to latitude 60° 18.7" North, thence southwesterly to the sea at latitude 60° 1.3" North, longitude 142° West, including those islands of the State of Alaska south of the described area located between longitudes 142° West and 148° 26" West.

A MOU exists between the DOI Alaska Pipeline Office and the Department of Homeland Security (Seventeenth USCG District). The MOU provides the specific delineation between Inland and Coastal Waters along the northern and southern portions of the Trans Alaska Pipeline System. A copy of this MOU can be found in the Regional Contingency Plan.

**COTP Western Alaska** (Commander, Sector Anchorage, Alaska) is the pre-designated FOSC for the coastal waters of Alaska, except those sections of Alaska covered by COTP Southeast Alaska and COTP Prince William Sound.

#### Offshore Facility FOSC:

USCG, the DOI, Bureau of Safety and Environmental Enforcement (BSEE), retains the following authorities:

The Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE), Oil Spill Preparedness Division's (OSPD) legal authorities and required operational capabilities for oil spill response for facilities located seaward of the coast line originate from 30 CFR §254. BSEE is one of the legacy agencies, birthed from the reorganization of the Minerals Management Service, founded to focus on offshore oil and gas activities. In addition to 30 CFR §254, there is required connectivity from BSEE to the National Response System (NRS), specifically 40 CFR §300.175(a):

"During preparedness planning or in an actual response, various federal agencies may be called upon to provide assistance in their respective areas of expertise...consistent with agency legal authorities and capabilities."

The NRS identifies the BSEE's legal authorities and capabilities within 40 CFR §300.175(b)(9)(v):

"Minerals Management Service [BSEE]: Oversight of offshore oil and gas exploration and production facilities under the Outer Continental Shelf Lands Act and the CWA; oil spill response technology research; and establishing oil discharge contingency planning requirements for offshore facilities."

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The BSEE has primary review and approval authority for oil spill contingency plans submitted for Outer Continental Shelf activities and has review and approval authority for oil spill contingency plans for offshore activities on State of Alaska submerged lands. During an incident response and in alignment with 40 CFR §300.175(a), BSEE may be expected to staff various positions within the Incident Management Team Command and General Staff, particularly for incidents with a nexus to oil well control. The Minerals Management Service (Now BSEE) and ADEC previously signed a Letter of Agreement for the purpose of coordinating and implementing oil spill prevention and response preparedness on State of Alaska submerged lands.

Effective in February 1994, an MOU was entered between the DOI, Department of Transportation (DOT), and the EPA regarding the delegation of responsibilities for spill prevention and control, contingency planning, and equipment inspections of oil and gas facilities. (A copy of this MOU is included in the Regional Contingency Plan). The coastline, as defined in the MOU, is "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." This MOU gives EPA responsibility for non-transportation-related offshore facilities located landward of the coastline. DOT has responsibility for transportation-related facilities, including pipelines, located landward of the coastline. In addition, the USCG has the responsibility for deep-water ports and associated seaward pipelines. This MOU gives DOI (Minerals Management Service) responsibility for facilities, including associated pipelines, located seaward of the coastline.

More details on the BSEE Oil Spill Preparedness Division can be found at the following link: https://www.bsee.gov/sites/bsee.gov/files/bsee-sop-approved-2017-edition.pdf

#### **FOSC for DOD and DOE Facilities:**

Per the National Contingency Plan, the Department of Defense (DOD) and the Department of Energy (DOE) shall provide FOSCs who will be responsible for taking all response actions to releases of hazardous substances, pollutants, or contaminants when the release is on, or the sole source of the release is from, any facility or vessel (including bareboat-chartered and operated vessels) under their jurisdiction, custody or control.

#### 1220.2 State On-Scene Coordinator Boundaries

**General:** State On-Scene Coordinator (SOSC) response boundaries for the State of Alaska are depicted on the map shown in Figure 1-11. Three area response teams are available for responding to oil and hazardous materials discharges/releases in their geographic area of responsibility. These teams and their areas of responsibility are as follows:

- Southeast Area Region: Southeast Alaska Geographic Zone.
- **Central Area Region:** Prince William Sound, Cook Inlet, Kodiak, Bristol Bay, Aleutian Islands, and Western Alaska Geographic Zones.
- **Northern Area Region**: Northwest Arctic, North Slope, Interior, and portions of the Prince William Sound Geographic Zones.

**Pre-designated SOSCs:** State On-Scene Coordinators have been pre-designated for responses to oil and/or hazardous substance releases within their area of responsibility. SOSC boundaries are shown below.

The Commissioner, Department of Environmental Conservation, may designate the Director of the Spill Prevention and Response Division or another individual to serve as the State On-Scene Coordinator for major incidents (Reference State Response Team, Type 1 Response Capability below).

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**Types of Incidents and Response Capability:** In addition to the pre-designated SOSCs, ADEC maintains trained area response teams to manage minor (Type 4), medium (Type 2-3), and major (Type 1) incidents. These teams and their response capabilities are described below.

Area Response Team - Type 2-4 Response Capability: Area Response Teams are generally ADEC's first responders who respond to releases, or potential releases as part of the initial response to protect people, property, and the environment. Area response teams are trained to identify hazards, take defensive actions to contain the release from a safe distance, keep it from spreading, prevent exposures, and secure the area. The most important functions of area response teams are to make proper notifications and initiate the emergency response sequence, when needed, to deal with Type 2-4 incidents.

**Type 4 Incidents** are characterized as small incidents that: can be managed with local resources, normally one response individual; involve no casualties or injuries; are limited in volume, generally < 55 gallon oil spills; and have minimal impact.

**Type 3 Incidents** are characterized as regional incidents that: may require activation of other area team resources; require a response staff of 2-10 personnel; involve larger release volumes, generally > 55 gallon oil spills; and have moderate impact potential.

**Type 2 Incidents** are characterized as statewide incidents requiring activation of other area team resources and more than 10 response staff. They involve significant release volumes, generally >100,000 gallon oil spills, and have moderate impact potential. Type 2 incidents typically result in expenditures greater than \$100,000 and may cover large geographic areas.

**Statewide Response Team - Type 1 Response Capability:** The Statewide Response Team is activated for large incidents requiring mobilization of statewide resources, participation of other State agencies and involvement of other jurisdictional interests. The Statewide Response Team will be staffed by ADEC's most experienced and senior personnel from the three regional teams.

**Type 1 Incidents** are characterized as statewide incidents that may involve oil spill volumes in excess of 1,000,000 gallons, require a very large response staff (> 20 personnel), and may result in severe impacts to the environment. Type 1 incidents may result in expenditures greater than \$1,000,000 and cover large geographic areas.

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SOSC Response Boundaries Deadhorse NORTH SLOPE NORTHWEST **NORTHERN** AREA SOSC Fairbanks WESTERN ALASKA WILLIAM SOUTHEAST CENTRAL AREA SOSC AREA SOSC Key: SOSC Boundaries

FIGURE 1-4: SOSC RESPONSE BOUNDARIES

#### 1300 - AREA COMMITTEE

The primary role of the Area Committee is to act as a preparedness and planning body for the Captain of the Port/Federal On-Scene Coordinator. The pre-designated FOSC for the USCG and the pre-designated SOSC from ADEC make up Area Committee leadership. They will select work group members and provide general direction and guidance for the work groups and the Area Committee. Each member is empowered by their own agency to make decisions on behalf of their organization and to commit the organization to carrying out roles and responsibilities as referenced in this plan.

The Area Committee improves coordination among the national, regional, local planning levels and enhances the availability of trained personnel, necessary equipment, and scientific support needed to address all oil discharges or hazardous substance releases. Area Committees also develop and manage updates to this plan that address planning and response related issues and concerns, including removal of worst-case oil discharges, responsibilities of owners and operators and government agencies in removing oil discharges and/or chemical releases, and procedures for obtaining an expedited decision regarding the use of dispersants. The plan provides detailed information on the geographic area covered by the plan and the response resources available within the FOSC's area of responsibility.

Area Committees are planning bodies, not response entities, although members of the Area Committees may have specific roles during response operations. The area committee should complement other required planning activities by providing a level of localized site-specific detail unavailable in the National or regional contingency plans. This Area Contingency Plan will be prepared

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under the direction of the Federal OSC for Sector Anchorage and the State On-Scene Coordinator for Western Alaska and the North Slope/Arctic, who should draw on the expertise of the agencies and entities referenced in the NCP, in addition to state and local resources.

The Prince William Sound Area Committee is encouraged to solicit advice, guidance or expertise from all appropriate sources, establish subcommittees, and work groups as necessary to accomplish the prepared need and planning task. The FOSC/SOSCs should solicit the advice of the Alaska Regional Response Team to determine appropriate work group representatives from federal, state, and local agencies. This includes tasking the RRTs with providing guidance to Area Committees to ensure inter-area consistency within each region.

# 1310 – Area Committee Stakeholders, Names, Organization & Contact Information - TBD 1320 – Purpose - TBD

#### 1330 - Organization

**Area Committee Members:** Please Reference USCG policy on who are able to participate as members and members at large of Area Committees in general. For a list of agencies and participants in the Arctic and Western Alaska Area Committee, Reference documents created by that area committee.

**Subcommittees and Workgroups:** Area Committee subcommittees seek to solicit advice, guidance or expertise from all appropriate sources and establish permanently standing subcommittees as necessary to accomplish the preparedness and planning tasks. The Area Committee selects members and provides general direction and guidance for any standing subcommittee. In addition to federal, state and local agency representatives, subcommittee participants may include facility owners/operators, shipping company representatives, cleanup contractors, emergency response officials, marine pilot associations, academia, environmental groups, consultants, response organizations and representatives from any applicable regional citizens' advisory councils.

#### 1340 – Charter Members-TBD

#### 1400 - NATIONAL RESPONSE SYSTEM (NRS)

#### <u>1410 – National Response Structure</u>

#### 1410.1 – Spill of National Significance SONS)

For a Spill of National Significance (SONS) in the coastal zone, the USCG Commandant may name a senior agency official to assist the FOSC in communicating with affected parties and the public and coordinating federal, State, local, and international resources at the national level. This strategic coordination will involve, as appropriate, the National Response Team, Alaska Regional Response Team, the Governor of Alaska, and the mayors or other chief executives of local governments.

Additionally, guidance can be found within the National Contingency Plan, 40 CFR 300.323.

#### 1420 – Regional Response Team (RRT) Structure

Reference the Regional Contingency Plan. Additionally, guidance can be found within the National Contingency Plan, 40 CFR 300.115.

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The Alaska Regional Response Team (ARRT) is a standing body established by the National Contingency Plan (NCP). The ARRT is responsible for recommending changes to the regional response organization as needed, revising the Regional Contingency Plan, as needed, evaluating the preparedness of participating agencies and the effectiveness of Area Contingency Plans for a federal response to discharges and releases, and providing technical assistance for preparedness to the general response community. The ARRT is composed of State and Federal agencies. The Alaska Department of Environmental Conservation provides the State's representative. The alternate State representative is provided by the Alaska Department of Military and Veterans Affairs/ Division of Homeland Security and Emergency Management. The ARRT provides a regional mechanism for the development and coordination of preparedness activities prior to a pollution response.

The ARRT can coordinate assistance and advice to the FOSC, when requested, by providing additional federal and State resources and expediting approvals for federal and State permits. The ARRT is chaired by the agency providing the FOSC (USCG or EPA).

While assigned to ICS sections within the Unified Command, ARRT members or their representatives are immediately available to work with other agencies that have similar concerns and responsibilities. This enhances the timeliness and thoroughness of decisions. A formal "convening" of the ARRT during a spill event will only be necessary for dispute resolution or major policy issues affecting multiple agencies. During any response requiring State input to the ARRT, the SOSC has been delegated the authority to serve as the State's representative to the ARRT. The SOSC, as the State representative, will consult with other State agencies that have management authorities/responsibilities for resources that might be affected by ARRT decisions. Appropriate ARRT members will convene as necessary to make decisions on *in situ* burning, use of chemical countermeasures, and nationwide permits (404 permits).

#### <u>1430 – Prince William Sound Area Response Structure</u>

### 1430.1 – Federal Role in Incident Response

1430.1.1 U.S. Coast Guard

The USCG is the lead agency for coastal oil and hazardous materials spill responses and shall serve as FOSC in the Unified Command. The role of USCG or EPA in the Unified Command will vary according to spill type and size. USCG has adopted <a href="https://doi.org/10.2508/jncident-Management-Handbook">https://doi.org/10.2508/jncident-Management-Handbook</a> for use in guiding their major spill response efforts. The guide provides detailed guidance for each ICS position identified for emergency response operations.

#### 1430.2 – State Role in Incident Response

1430.2.1 Department of Environmental Conservation

The Alaska Department of Environmental Conservation (ADEC) is the lead agency for the State of Alaska in oil and hazardous materials spill response. ADEC serves as the SOSC in the Unified Command. The Statewide Oil and Hazardous Substance Incident Management System Workgroup (consisting of ADEC, industry, spill cooperatives, and federal agencies) has published <a href="The Alaska Incident Management System">The Alaska Incident Management System</a> (AIMS) Guide for Oil and Hazardous Substance Response. The AIMS Guide provides ADEC personnel and other response personnel with the detailed guidance necessary to properly respond to a major spill incident.

#### 1430.3 –Local Response Structure

In the event of an oil spill or hazardous substance release in the Prince William Sound (PWS) Area, a senior member of the local community with jurisdiction, unless otherwise specified by local plans, may serve as the LOSC in the Unified Command. For all spills in PWS Area in which the ICS is implemented, the LOSC will sit in the Unified Command with the FOSC, SOSC, and RPOSC, sharing decision-making and oversight

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responsibilities with the other On-Scene Coordinators. For spills that affect or threaten to affect multiple jurisdictions in PWS Area, or outside of the area, appropriate officials from the affected communities will integrate into the command structure either through a LOSC liaison representing the affected communities or through a Regional Stakeholder Committee.

As long as an immediate threat to public safety exists, the LOSC will serve as the ultimate command authority for the public safety issue, while the FOSC, SOSC, and RPOSC work with the LOSC to ensure mitigation of the situation. So long as the threat to public safety remains, the LOSC will be guided by the applicable Local Emergency Response Plan developed by the local emergency services staff. If the FOSC, SOSC, or RPOSC does not assume the lead role for response, the LOSC may request higher authority to assume that responsibility.

#### 1430.4 – Responsible Party Policy

Under federal and state law, the RP is responsible to contain, control, and clean up any oil or hazardous substance spilled. RP must notify the federal, state, and local authorities of the spill incident and initiate an effective response. RP is expected to respond to an incident using their own resources and securing additional contractual expertise and equipment when necessary. FOSC and SOSC have the authority to oversee the RP's activities, and both are authorized to take over or supplement the RP's response activities if they determine those activities to be inadequate. During an RP-driven response, if the vessel or facility has a contingency plan (C-plan), it will serve as the primary guidance document for the spill response, and the Responsible Party will designate the Incident Commander. If there is no RP, or if the RP does not have a government-approved C-plan, the RCP and PWS Area C-plan will become the guiding document during the spill response.

#### 1430.5 – Primary Response Action Contractors (RAC) and Oil Spill Removal Organizations (OSRO)

Primary Response Action Contractors (RAC) and Oil Spill Response Organizations (OSRO) may play an important role in a spill response. Primary RACs and OSROs are organizations that may enter into a contractual agreement with an RP (vessel or facility owner/operator), assisting the RP in spill cleanup operations. RACs/OSROs can provide equipment, trained personnel and additional resources. The Operations/Technical Manuals maintained by the RACs/OSROs may be referenced in vessel or facility contingency plans and serve as supplementary reference documents during a response. OSROs generally have access to large inventories of spill equipment and personnel resources. FOSC or SOSC may contract these assets for use. Select equipment located within PWS Area is referenced in the Resources Section of this Plan. Equipment inventories are listed in the respective Operations/Technical Manuals of the RACs and OSROs.

#### 1430.6 – Regional Citizens Advisory Councils (RCAC)

There are two RCACs in Alaska, PWSRCAC and Cook Inlet RCAC. RCACs are independent, non-profit organizations created by the Oil Pollution Act of 1990 to monitor and advise on oil industry programs related to spill prevention and response, tanker safety and environmental impact assessments. During a spill response, RCACs monitor on-water activities and observe and verify spill response and cleanup efforts. RCACs inform local community members and other concerned groups about response activities and provide information on local concerns and priorities to the Unified Command in order to facilitate operational decisions.

The Prince William Sound Regional Citizens' Advisory Council (RCAC) is a local citizens group with an Oil Pollution Act of 1990-mandated role in PWS spill response activities. In this role, the RCAC participates with

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the incident management team at the emergency operations center and monitors on-water activities during a spill. The RCAC has four primary tasks to perform during a spill: observe, verify, inform, and advise.

By observing and verifying emergency spill response and cleanup efforts, the RCAC is able to properly inform local residents, communities and concerned groups. The RCAC also provides information on local knowledge and concerns to incident commanders that can prove valuable to operational decisions. The RCAC is a resource for the Unified Command and participates in the Regional Stakeholder Committee when it is established and functioning for a spill response.

Specific responsibilities of the RCAC include:

- Providing a voice for local communities and citizens in the policies and decisions that affect them.
- Advising the oil industry and the public on oil spill prevention and response and ways to mitigate the environmental impact of terminal, offshore oil facilities, and tanker operations.
- Monitoring terminal, tanker, and offshore oil facilities operations and implementation of spill
  prevention and response plans.
- Increasing public awareness of private oil industry's current capabilities in spill prevention and response and the environmental impacts of oil transportation.
- Fostering long term partnership between industry, government and local communities.
- Conducting independent research.
- Participating in, monitoring, and critiquing actual spill responses, spill drills, deployment exercises, and spill simulations conducted by industry. The RCAC also assists industry and regulatory agencies in drill planning and post-drill evaluations.
- Participating in the Regional Stakeholder Committee.

#### 1430.7 – Regional Stakeholder Committee (RSC)

RSC will be activated for significant incidents to advise the Unified Command and provide recommendations or comments on incident priorities, objectives and community concerns. RSCs do not play a direct role in setting incident priorities or allocating resources; however, the RSC can advise the Unified Command (usually through the Liaison Officer) and provide recommendations or comments on incident priorities, objectives, and the incident action plan. RSC is not directly involved in tactical operations, though some of its members may be. Each RSC will be facilitated by a chairperson elected by the RSC members. RSC composition may vary from incident-to-incident and may include community emergency coordinators, local or tribal government representatives, local or private landowners and leaseholders, Native organizations, non-profit and volunteer organizations, and other stakeholder groups affected by the spill. For spills affecting the PWS Area, PWSRCAC may be called upon to assume the role of the RSC until one is formally seated by the Unified Command.

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#### 1440 – Incident Command System (ICS)

The oil and hazardous substance discharge response Incident Command System (ICS) as referenced in the Regional Contingency Plan will be used during a spill response in the Prince William Sound Area. In the event of an actual or potential oil or hazardous materials release, an Incident Command System response will be activated. The ICS is based on the National Incident Management System (NIMS), which was developed to coordinate agency action and provide a command structure for use during emergency response events. In the State of Alaska, the Unified Command application of the Incident Command System is used for response to oil and hazardous material spills.

The Incident Command System allows federal, state, and local governments to participate in the spill response both in an oversight capacity and as participants in the containment, control, and cleanup of the spill. The ICS is organized around five major functions: Command, Planning, Operations, Logistics and Finance/Administration. The basic ICS structure remains the same in all incidents, but the magnitude and complexity of the spill emergency will dictate which functional areas will be activated and to what level. The ICS can be expanded or contracted to suit the size and scale of the spill.

The Incident Command System is led by a Unified Command, which directs all aspects of incident response (including oversight, monitoring, cleanup, etc.), and includes an Incident Commander (IC), who is in command of the control, containment, removal, and disposal of the spill. The Unified Command is typically comprised of the Federal On-Scene Coordinator (FOSC), the State On-Scene Coordinator (SOSC), the Local On-Scene Coordinator (LOSC), and the Responsible Party representative (RP). The Unified Command is implemented in situations where more than one agency has jurisdiction. When the RP is identified, the senior representative of the RP joins the Unified Command and is designated the Incident Commander (IC). When there is no RP, or the RP is unable to satisfactorily respond to a spill, the spill response will be directed by an Incident Commander designated by the agency with jurisdictional authority (federal, state, or local.)

Below the command level, positions within the ICS can be filled by employees of the RP (recommended) or its independent contractors. The exact size and composition of an ICS will vary according to the needs of the response and the experience level of the personnel involved. Government agency personnel may supplement ICS staffing as necessary.

By integrating response management early in the response, consensus and mobilization can be more quickly achieved and limited resources combined to reduce duplication of effort and enhance response effectiveness.

#### 1440.1- Expanding Incidents

A spill response progresses through a series of steps, and the number of personnel and amount of equipment is increased (or decreased) as necessary to meet the demands of the situation. This increase of resources to address response needs is called a "ramp up." The USCG will rely on their Incident Management Handbook and State of Alaska personnel will employ the AIMS Guide and Type 1 response action plans to direct their staffing of emergency response teams.

The ramp up begins when the spill is first reported and then progresses with the sequential and prioritized activation of the response resources of RP and the local, state and federal responders. Each spill response will differ according to spill size and severity, location, season, and a variety of other factors. Personnel needs will vary accordingly.

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The ramp up procedures and personnel requirements presented below are provided as guidance for the Unified Command during the initial staffing of ICS. ICS can expand and contract to meet the needs of an emergency response without any loss of effectiveness or control. The goal for any major spill is to have the personnel in place to staff a complete ICS within the first 96 hours of a response. In addition to federal and state responders, several Prince William Sound communities have numbers of trained personnel available to help staff an ICS. Contact the local emergency management organizations listed in Part One of this Section to recruit local, trained personnel to assist in the response effort.

The ramp up to a full oil spill response generally moves through three staffing levels. The **Initial Response Team** (Hours 0-6) will consist primarily of first responders who will carry out initial response actions. The **Transitional Response Team** (Hours 6-96) will form as additional personnel arrive on-scene and ICS functions are added. The **Full Response Team** (by Hour 96) will be complete when full ICS staffing levels have been reached. Qualified personnel within the ICS will identify resources and equipment necessary for an effective response.

In those incidents where there is imminent threat to public health and safety, the appropriate local Fire Chief, State Trooper, or Emergency Manager will be the Incident Commander.

This ramp up guidance outlines the response of the federal, state and local personnel. Responsible Party personnel will also initiate a concurrent ramp up according to the procedures described in their contingency plan, if available.

#### Hour 0-6: Initial Response Team

The Initial Response Team will consist primarily of the FOSC and SOSC response officers, natural resource trustees (if available), local emergency response and RP personnel. The Initial Response Team will carry out initial response efforts, which include notification and equipment mobilization. Depending on the size of the spill, a Unified Command may begin to form as the Initial Response Team carries out these response actions.

**Notifications:** RP is ultimately responsible for making notifications to local, state and federal agencies. Notifications will include local officials, police, and fire departments. USCG or EPA will notify the appropriate federal agencies listed as agency contacts on page A-2 and other points of contact, as necessary. The FOSC will notify appropriate natural resource trustees to begin the consultation process on resources at risk (including threatened and endangered species and their critical habitats), response actions that may affect trust resources (including threatened and endangered species and their critical habitats), and response actions to protect or reduce the injury of trust resources. ADEC will notify the appropriate State agencies as noted on the contact list on page A-3. Each agency will activate appropriate staff and equipment to respond to PWS Area.

**Initial Response Action:** Following these notifications, the initial responders will assess the chemical characteristics of the spilled material and establish a safe level of Personnel Protective Equipment (PPE) prior to dispatching a response team to the scene. Upon arrival, the response team will conduct a site characterization to evaluate environmental hazards. Upon ensuring a safe operating environment, they will attempt to determine the source of the spill, identify the responsible party, secure the source of discharge, and begin to gather data for the ICS to use to formulate a response strategy or validate the RP's strategies. This initial response team will normally have no containment or product removal means with them at this time, unless provided by the RP. If local authorities or federal/state responders identify an immediate threat

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to public health and safety, appropriate action shall be initiated. If the situation warrants, an evacuation may be implemented according to the procedures described in the local emergency response plan.

The response team will contact FOSC and/or SOSC, report the details of the spill, and initiate a preliminary investigation into the cause of the spill. The response team will advise RP regarding the legal requirement to initiate containment and recovery actions. FOSC will be advised of the severity of the spill and will activate the ICS. FOSC and/or SOSC will brief the federal, state and local government agencies regarding the spill status and ramp up procedures. FOSC will continue to consult with natural resource trustees on actions to be taken that may affect trust resources, including threatened and endangered species and their critical habitats. FOSC will activate an FOSC Historic Properties Specialist unless the FOSC determines that the incident is categorically excluded from the National Programmatic Agreement to protect historic properties.

ADEC will select any available state resource agency personnel to serve as a local contact until ADEC responders arrive on-scene. ADEC will request that the Alaska Department of Natural Resources (ADNR) and the Alaska Department of Fish and Game (ADFG) identify environmental priorities for protection. ADNR and ADFG will use the environmental sensitivities information in this plan as a primary source for this information. NOAA may also be contacted for initial environmental sensitivity and wildlife concentration information. ADEC will forward these priorities to IC and the Unified Command.

RP is responsible for deploying appropriate privately-owned pollution response equipment as quickly as possible, regardless of whether federal/state equipment has been deployed in the interim. The FOSC/SOSC may assist the RP and arrange for initial delivery of pollution response gear via the most expedient mode of transportation.

**Command Center Establishment:** A field command post will be assembled to coordinate efforts until the FOSC, SOSC, LOSC and RP can establish the command center. The location of this field command post will depend upon the location and severity of spill, time of year, weather, and other considerations. Details on potential field command post locations, staging areas and potential command center locations throughout PWS Area are included in the Resources Section of this plan.

State, federal, and local personnel arriving on-scene should realize that workspace, telephone lines, and other office resources may be limited during the initial response. Individuals are encouraged to bring cellular phones to communicate with their respective home offices (realizing that cellular phone capabilities may be severely limited or non-existent at the incident location).

**Staging Areas:** In Part Four of the Resources Section of this plan, potential staging areas have been identified and profiled for each of the communities and remote facilities in PWS Area.

#### **Hour 6-96: Transitional Response Team**

The Transitional Response Team forms as additional federal, state and local response personnel arrive on-scene. After the initial response, the scope and size of the spill can be gauged, and the Unified Command will come together and ICS staffing will increase. In a government-led spill, the Unified Command will designate an IC. In a RP-led response, IC will be a representative of the RP. IC will designate appropriately trained personnel as Section Chiefs for the Operations, Planning, Logistics, and Finance/Administration Sections. As the response develops, appropriate ICS functions will be added until a full response team is in place.

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#### Hour 96: Full Response Team

A full ICS response team should be assembled within 96 hours of the spill response. Staffing-depths and positions-filled will vary with the response, as will the order in which these positions are filled. The Full Response Team will follow the command structure described in AIMS Guide and/or USCG Incident Management Handbook. Response personnel may include federal, state and local agency personnel, employees of RP, independent contractors, and other organizations as appropriate.

#### 1450 – Area Exercise Mechanism

The USCG and the EPA are required to follow the PREP Guidelines in the planning and execution of their Area Exercise programs. Area exercises, which exercise the government's Area Contingency Plans, are conducted on a quadrennial schedule, whereas industry plan holders are required by regulation to exercise their entire response plans every three years. The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as that geographic area for which a separate and distinct ACP has been prepared, as described in OPA 90. The response community is comprised of the Federal, State, and local Government and industry, including inviting tribal entities to participate. The area exercises are designed to exercise the Government and industry interface for spill response or response to a significant threat a spill.

#### 1450.1 – National Preparedness for Response Exercise Program (NPREP)

The 2016 NPREP Guidelines can be viewed at <a href="https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/2016-national-preparedness-response-exercise program">https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/2016-national-preparedness-response-exercise program</a>

#### 1450.2 —Participation in NPREP

Completion of the exercises described in the PREP Guidelines is one option for maintaining compliance with OPA 90-mandated federal oil pollution response exercise requirements.

#### 1460 – Federal Response Framework

Reference the following FEMA website for information on the National Response Framework: <a href="https://www.fema.gov/media-library/assets/documents/32230">https://www.fema.gov/media-library/assets/documents/32230</a>

### 1470 - Federal Radiological Response Plan

Reference the following link to access the Nuclear/Radiological Incident Annex (NRIA) to the National Response Framework document:

https://www.fema.gov/pdf/emergency/nrf/nrf nuclearradiologicalincidentannex.pdf

#### 1500 - STATE/LOCAL RESPONSE SYSTEM - TBD

#### <u>1510 – Response Agreements</u>

#### 1510.1 Community Spill Response Agreements:

ADEC has entered into 45 Community Spill Response Agreements (CSRA) with boroughs and municipalities across Alaska. The CRSA allow ADEC to reimburse local governments for spill response activities undertaken at the request of the SOSC. ADEC can activate a "generic" agreement in emergency response situations to allow for the reimbursement of communities that lack a signed CSRA. In the Prince William Sound Area, ADEC has signed agreements with the City of Cordova, City of Valdez, and the City of Whittier.

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#### 1510.2 - Local Response Equipment Caches:

ADEC has identified 56 strategic locations throughout Alaska for the pre-placement of response equipment caches and has worked with local communities to position them. In the Prince William Sound Area, ADEC has placed an equipment connex in Cordova, Valdez, and Whittier. USCG also maintains equipment caches at Cordova and Valdez. A listing of equipment contained in these conexes is shown on page B-74.

#### 1510.3 - Hazardous Materials Response:

Since few communities have the financial or personnel resources to maintain a Level A/Level B hazardous materials response team, ADEC has entered into agreements with the Fairbanks North Star Borough, Municipality of Anchorage, the City of Kodiak, the City and Borough of Juneau, and the City of Ketchikan to have their hazmat teams respond to incidents outside of their jurisdiction when practicable. Further information on these agreements can be found in the Hazmat Section of this plan.

#### 1520 - State and Federal Agreements

State and federal agencies have signed agreements supporting the cooperative efforts they will take with each other during an emergency response to an oil spill or hazmat release. These agreements can establish jurisdictional boundaries, outline responsibilities, clarify roles, and/or specify conditions of support. Copies of these Memorandums of Understanding and Memorandums of Agreement can be found in the RCP.

#### 1600 - NATIONAL POLICY AND DOCTRINE-TBD

#### 1610 – Public vs. Private Resource Utilization - TBD

1610.1 - Vessel Removal - TBD

1620 - Best Response Concept - TBD

#### 1630 – Cleanup Assessment Protocol (How clean is clean?)

Whether the response is conducted by a RP or the federal government, the FOSC is responsible for determining removal completeness and authorizing termination of operations. When uncertain, the FOSC may seek the advice of the ARRT. Generally, removal of an oil discharge is complete when:

- 1. There is no longer any detectable oil present on the water, adjoining shorelines, or places where it is likely to reach the water.
- 2. Further removal operations would cause more environmental harm than the oil to be removed.
- Cleanup measures would pose a hazard to responders, or would be excessively costly in view of their insignificant contribution to minimizing a threat to the public health or welfare, or the environment; and
- 4. Activities required to repair unavoidable damage resulting from removal actions have been performed.

#### <u>1640 – Alternative Response Technologies</u>

#### 1640.1 – Dispersant Pre-Approval/Monitoring/Decision Protocol

Reference Appendix III of the Alaska Regional Contingency Plan for the Oil Dispersant Guidelines for Alaska. Additional technical assistance for dispersant application can be found in the ADEC STAR Manual at the following link: <a href="http://dec.alaska.gov/spar/PPR/star/docs.htm">http://dec.alaska.gov/spar/PPR/star/docs.htm</a>

#### 1640.2 – In Situ Burn (ISB) Approval/Monitoring/Decision Protocol

Reference the Alaska Regional Contingency Plan. Additional technical assistance for dispersant application can be found in the ADEC STAR Manual at the following link: http://dec.alaska.gov/spar/PPR/star/docs.htm

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#### 1640.3 – Bioremediation Approval/Monitoring/Decision Protocol- TBD

#### 1640.4 – Alternative Response Technology Evaluation System (ARTES)

Information on the Alternative Response Technology Evaluation System can be found at the NOAA website at the following link:

https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/alternative-response-tool-evaluation-system-artes.html

#### 1640.5 - Special Monitoring of Applied Response Technology (SMART)

Reference Appendix III of the Alaska Regional Contingency Plan for the Oil Dispersant Guidelines for Alaska to include SMART guidance. Additional technical assistance for dispersant application can be found in the ADEC STAR Manual at the following link: <a href="http://dec.alaska.gov/spar/PPR/star/docs.htm">http://dec.alaska.gov/spar/PPR/star/docs.htm</a>

#### 1650 - Fish and Wildlife Acts Compliance

1650.1 Migratory Bird Treaty Act (MBTA)

For information on the ESA, reference the following U.S. Fish and Wildlife Service website: <a href="https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php">https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php</a>

#### 1650.2 —Marine Mammal Protection Act (MMPA)

For information on the ESA, reference the following U.S. Fish and Wildlife Service website: <a href="https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/marine-mammal-protection-act.html">https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/marine-mammal-protection-act.html</a>

#### 1650.3 – Endangered Species Act (ESA)

For information on the ESA, reference the following U.S. Fish and Wildlife Service website: https://www.fws.gov/endangered/laws-policies/

#### 1660 – Protection of Historic Properties (National Historic Preservation Act (NHPA))

For information on NHPA, reference the following FEMA website: <a href="https://www.fema.gov/national-historic-preservation-act-1966-amended-2000">https://www.fema.gov/national-historic-preservation-act-1966-amended-2000</a>

1700 - RESERVED

1800 - RESERVED

1900 - RESERVED FOR AREA/DISTRICT

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#### 2100 - UNIFIED COMMAND (UC)

The oil and hazardous substance discharge response Incident Command System (ICS) will be used during a spill response in the Prince William Sound Area. In the event of an actual or potential oil or hazardous materials release, an Incident Command System response will be activated. The ICS is based on the National Interagency Incident Management System (NIIMS), which was developed to coordinate agency action and provide a command structure for use during emergency response events. In the State of Alaska, the Unified Command application of the Incident Command System is used for response to oil and hazardous material spills.

The Incident Command System allows for federal, state, and local governments to participate in the spill response both in an oversight capacity and as participants in the containment, control, and cleanup of the spill. The ICS is organized around five major functions: Command, Planning, Operations, Logistics and Finance/Administration. The basic ICS structure remains the same in all incidents, but the magnitude and complexity of the spill emergency will dictate which functional areas will be activated and to what level. The ICS can be expanded or contracted to suit the size and scale of the spill.

The Incident Command System is led by the **Unified Command**, which directs all aspects of incident response (including oversight, monitoring, cleanup, etc.), and includes an **Incident Commander (IC)**, who is in command of the control, containment, removal, and disposal of the spill. For the Prince William Sound Area, the Unified Command is typically comprised of the Federal On-Scene Coordinator (FOSC), the State On-Scene Coordinator (SOSC), the Local On-Scene Coordinator (LOSC), and the Responsible Party On-Scene Coordinator (RPOSC). The Unified Command is implemented in situations where more than one agency has jurisdiction. When the Responsible Party is identified, the RPOSC, usually a senior representative of the Responsible Party (RP), is the IC. When there is no RP, or the RP is unable to satisfactorily respond to a spill, the spill response will be directed by an Incident Commander designated by the agency with jurisdictional authority (federal, state, or local.)

Below the command level, positions within the ICS can be filled by employees of the RP or its independent contractors. The exact size and composition of an ICS will vary according to the needs of the response and the experience level of the personnel involved. Government agency personnel may supplement ICS staffing as necessary.

By integrating response management early in the response, consensus and mobilization can be more quickly achieved and limited resources combined to reduce duplication of effort and enhance response effectiveness.

#### 2110 - Command Representatives

#### 2110.1 - General

Each Federal and State agency that has a role in an oil or hazardous substance response will designate an Agency Representative. An Agency Representative has been delegated full authority to make immediate and pertinent decisions on all matters affecting that agency's involvement with the incident. There will be **only one** Agency Representative assigned to the incident from each responding agency. The Agency Representative will work directly with the FOSC, SOSC, or his/her designee to resolve disputes. For the USCG or EPA, the Agency Representative is the FOSC or the FOSC's designated representative. For ADEC, the Agency Representative will be the SOSC. When no Agency Representative is present or assigned, the FOSC or SOSC will contact the appropriate agency.

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Under the National Contingency Plan (NCP) and State statutes, State and Federal Governments are responsible for ensuring responses to oil and hazardous substance incidents are timely and adequate. This responsibility has three aspects:

- Conduct the Government's oversight functions concerning monitoring, investigating, permitting, conducting damage assessments, restoration, and collecting documentation for possible litigation or cost recovery.
- Augment the RP's cleanup efforts, when necessary, to contain the release, recover the product, and minimize the impact to the environment.
- Take over containment, control and cleanup operations when necessary.

Federal and State governments conduct and coordinate these three functions using the Unified ICS. The Federal and State Governments' oversight function only involves government or contracted resources, although it is coordinated with other parties involved in the cleanup effort.

The following are helpful resources for establishing a case specific organization:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response.

#### 2110.2 - Federal Representative

The Federal On-Scene Coordinator (FOSC) is designated under the National Contingency Plan to direct and coordinate the federal response to incidents under the authority of federal laws and regulations. Federal responsibilities are divided into a Coastal zone and an Inland zone, as defined by an interagency agreement between EPA and the USCG. In the Coastal zone, the Commanding Officers of the USCG Sectors (or Captain of the Ports) are designated as FOSCs for oil discharges and hazardous substance releases. For oil discharges and hazardous substance releases in the Inland zone, the Environmental Protection Agency designates the FOSC. For hazardous substances releases from any facility or vessel under the DOD's or DOE's jurisdiction, the department with jurisdiction designates the FOSC.

For federal agencies, the ARRT representative for the incident will serve as the Agency Representative unless otherwise designated.

#### 2110.3 - State Representative

The commissioners of each supporting State agency shall appoint the Agency Representative for their department.

The State On-Scene Coordinator (SOSC) is responsible for directing and coordinating the State's response to oil and hazardous substance discharges. SOSCs are designated by the Commissioner of the ADEC. SOSCs have been pre-designated for the following response areas: Northern Alaska; Central Alaska; and Southeast Alaska. In the event of a major spill, the Commissioner may designate the Director, Spill Prevention and Response Division or another individual to serve as the SOSC. The SOSC may appoint an on-scene field representative (SOSC Rep) to act for the SOSC during a response. The SOSC Rep can be selectively delegated authority by the SOSC.

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#### 2110.4 – Local Representative

Local On-Scene Coordinators (LOSCs) are designated by local governments with jurisdiction to direct and coordinate local responses to incidents. LOSCs are normally part of the Unified Command <u>as long as there</u> is an immediate threat to public safety and/or the incident occurs within their jurisdiction.

For Once immediate threats to public safety are abated, either the SOSC or FOSC becomes the ultimate command authority for the cleanup operation, depending on jurisdiction and agency response. Local representation to the Unified Command may then be through the CEC on the Regional Stakeholder Committee.

**Community Emergency Coordinators (CECs)** are designated in Local Emergency Response Plans and may serve as the LOSC or on the Regional Stakeholder Committee (RSC).

Local Emergency Response Plans (developed by Local Emergency Planning Committees, if established for the jurisdiction) designate Community Emergency Coordinators for responding to oil and hazardous substance releases.

#### 2110.5 - Responsible Party Representative

The Responsible Party's On-Scene Coordinator (RPOSC) will direct and coordinate their resources in response to incidents for which they are responsible. Facility or vessel response or contingency plans designate the RPOSC. If the facility or vessel does not have a response or contingency plan, the RP will designate their OSC.

The Responsible Party (RP) is the person(s) responsible for a discharge of a hazardous substance to the water or land of the State. Under State regulations (18 AAC 75.315), it is the responsibility of the RP to contain, control and clean up their discharge. Similar federal laws require RPs to respond to their spills and oblige the RP to direct its own containment, control and cleanup efforts. Even though the RP is required to respond to a spill, the State On-Scene Coordinator (SOSC) oversees the RP's containment, control and cleanup efforts and has the authority to take over or supplement the response activities if the SOSC determines that the response is inadequate (18 AAC 75.320). The Federal On-Scene Coordinator (FOSC) has similar authority under federal law. Additionally, the Oil Pollution Act of 1990 (OPA 90) authorizes the United States USCG (USCG) to direct the RP's activities without "federalizing" (taking federal control) the spill cleanup efforts.

The RPs may use contracted resources, which may include Oil Spill Response Organizations (OSROs), Incident Management Teams (IMTs), and Non-Tank Vessel Cleanup Contractors (NTVCCs), to assist the RP or to act on their behalf during the incident responses. These entities may fill ICS positions, or work in the field to facilitate cleanup efforts.

#### 2110. 6 - Area Command

An Area Command Authority (ACA) will be established during a disaster, such as an earthquake, when the State is faced with multiple oil and hazardous material spills. The ACA will assume overall command and coordination of the various spill incidents only. The SOSC for the affected region will be the ACA. The individual incidents will be under the command of SOSC representatives. The ACA [SOSC] will prioritize the State's responses to the separate incidents. The ACA will coordinate all spill response efforts with the State Coordinating Officer (SCO). The use of an Area Command Authority is also one possible way of managing a single very large spill.

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#### 2110.7 - Single Command

When an incident occurs with single jurisdiction and one agency has primary responsibility, the single command structure will be established. For significant oil spills and hazardous substance releases, there will normally be OSCs from the RP, federal and state governments. There may also be a local OSC for incidents posing an immediate threat to public safety and those within their local jurisdiction. When there is not an RP; the RP is unable to respond satisfactorily; or the Federal, State or local government takes over response activities, the OSC will be determined by the agency with jurisdictional authority.

The Unified Command operates with the FOSC having ultimate authority for incidents under federal jurisdiction and the SOSC having ultimate authority for incidents not involving federal jurisdiction. As long as there is an immediate threat to public safety, a Local On-Scene Coordinator (LOSC) will serve as the ultimate command authority if the FOSC or SOSC do not assume the lead role for response, or until the LOSC requests a higher authority to assume that responsibility. The RP retains authority as long as they are adequately responding to the incident (and there is no immediate threat to public health and safety). The Unified Command will respect all governmental agencies' and private jurisdictional authorities. Most of the time, the Unified Command will be able to agree upon a single incident action plan. In cases where there are disputes or differences, the OSC having ultimate authority described above will settle these disputes.

- a) When the federal government is participating, an FOSC will be provided by the USCG, EPA, or Department of Defense (DOD). The USCG will manage spills in the coastal zone; EPA will manage inland spills, and the DOD will provide the FOSC if a hazardous substance release involves military resources and occurs on military facilities.
- b) If there is no federal jurisdiction or the FOSC designates the State to act as the FOSC's representative, the State SOSC is in charge, so federal trustee agencies should contact and coordinate with the SOSC.

#### <u>2120 – Guidance for setting response objectives</u>

This part identifies the initial response objectives and actions that shall be taken for an oil or hazardous substance spill in PWS Area, including the "ramp up" procedures and processes necessary to address an emerging incident.

**NOTE: "General Emergency Response Procedures"** that are applicable throughout the State are contained in **the Introductory Section of the RCP**.

**RESPONSE OBJECTIVES:** Regardless of the nature or location of a spill, the following objectives shall guide all response actions:

- 1. Ensure safety of responders and the public.
- **2.** Stop the source of the spill.
- **3.** Deploy equipment to contain and recover the spilled product.
- **4.** Protect sensitive areas (environmental, historic properties, and human use).
- **5.** Track the extent of the spill and identify affected areas.
- **6.** Cleanup contaminated areas and properly dispose of wastes.
- 7. Notify and update the public. Provide avenues for community involvement where appropriate.

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**SCOPE OF ACTIVITIES**: This list assists IC, either government or RP, and staff in completing the initial response actions associated with a medium to large-sized oil spill. This list is not exhaustive and should be used at the discretion of the IC and the Unified Command.

## 1. DEFINE NATURE OF INCIDENT

- a. Determine facts of spill.
  - Responsible Party (name and phone #)
  - Location and time of incident
  - Type of incident (explosion, grounding, operational, etc.)
  - Type of product
  - Movement of spilled product
  - Environmental resources, sensitive areas, and historic properties at risk
- b. Determine whether RP is willing/able to respond.
- c. Classify size of spill.
- d. Notify natural resource trustees
- e. The FOSC or FOSC's authorized representative needs to:
  - Consult with Department of the Interior (DOI) and Department of Commerce (DOC) to determine the presence of, and potential impacts to, threatened and endangered species and their critical habitat; and 2) determine whether the incident is categorically excluded under the Programmatic Agreement to protect historic properties and, if appropriate, activate an FOSC Historic Properties Specialist.

## 2. EVALUATE HAZARDS TO HUMAN HEALTH/SAFETY

- a. Determine threat to public health.
- b. Assess fire/explosion hazard.
- c. Assess personnel safety based on potential/existing hazards.
- d. Determine appropriate level of personnel protective equipment for responders.

#### 3. EVALUATE SEVERITY OF INCIDENT AND THE NEED FOR ADDITIONAL RESOURCES

- a. Estimate amount of spilled product and total potential amount.
- b. Estimate duration of spill response efforts.
- c. Assess weather/sea conditions.

## 4. INITIATE RESPONSE STRATEGY

- a. Protect responders and the public.
- b. Secure or isolate the source of spill.
- c. Consult with natural resource trustees on the protection of sensitive areas and resources and on potential response actions to be taken
- d. If threatened or endangered species or their critical habitat areas are present, continue consultation with appropriate DOI and NMFS representatives in accordance with the Oil Spill Response section of the Memorandum of Agreement for the Endangered Species Act
- e. Initiate containment and recovery of spilled product.
- f. Initiate spill tracking.

## 5. INFORM LOCAL RESIDENTS/COMMUNITIES/AND OTHER STAKEHOLDERS

a. Prepare Press Statement.

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- i. Report that USCG, EPA, ADEC, RP and local emergency response personnel are responding to discharge event.
- ii. Give brief details of the discharge.
- iii. Describe actions taken by the Unified Command.
- iv. Announce that formal press release will be prepared as more information is received.
- b. Contact Local Media. (Local radio, newspaper and television contact information available in Resources Section, Part Three, page B-88)
- c. Be forthcoming, and provide as much information as quickly as possible. If no information is available, say so but ensure that information is provided to the media as soon as it is available.
- d. Conduct appropriate briefings via the ICS Liaison Officer

#### 2130 – General response priorities

Reference the National Contingency Plan, 40 CFR 300.317, for the National Response Priorities.

#### 2200 - SAFETY

Personnel involved in oil spill response activities must comply with all applicable worker health and safety laws and regulations. The primary federal AND state regulations are the Occupational Safety and Health Administration (OSHA) standards for hazardous waste operations and emergency response found in 29 CFR 1910.120 and 08 AAC 61, respectively. These rules regulate the safety and health of employees involved in cleanup operations at uncontrolled hazardous waste sites being cleaned up under government mandate and in certain hazardous waste treatment, storage, and disposal operations conducted under the Resource Conservation and Recovery Act of 1976 (RCRA). The regulations also apply to both emergency response and post-emergency cleanup of hazardous substance spills. The definition of hazardous substance used in these regulations is much broader than the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), encompassing all CERCLA hazardous substances, RCRA hazardous waste, and all Department of Transportation (DOT) hazardous materials listed in 49 CFR part 172. Thus, most oils and oil spill responses are covered by these regulations. The rules cover employee protection during initial site characterization and analysis, monitoring activities, material handling activities, training, and emergency response.

OSHA classifies an area impacted by oil as an uncontrolled hazardous waste site. However, the regulations do not automatically apply to an oil spill cleanup. There must be an operation that involves employee exposure or the reasonable possibility for employee exposure to safety or health hazards. A typical beach cleanup worker collecting tar balls of weathered oil or deploying sorbents to collect sheen may not be exposed to a safety or health risk. The role of the site safety and health supervisor is to assess the site, determine the safety and health hazards present, and determine if OSHA regulations apply. If an OSHA field compliance officer is on scene, he or she should be consulted to determine the applicability of OSHA regulation. Disputes should be referred to the Department of Labor representative on the Alaska Regional Response Team (RRT). The individual making the site characterization should communicate the hazards associated with the spill and provide recommendations for the protection of workers' safety and health through a site safety plan. The responsibility for the health and safety of personnel supporting a pollution response mission rests with the On-Scene Coordinator (OSC).

In an oil spill response where OSHA regulations apply, the OSC must ensure that paragraphs (b) through (o) and paragraph (q) of 29 CFR 1910.120 are complied with. Of most concern are the training requirements for response personnel. Personnel who are routinely involved in pollution response should complete a 40-hour course meeting the OSHA training in paragraph (e) of 29 CFR 1910.120. Training records should reflect

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that OSHA requirements have been satisfied. Contractors are responsible for certifying the training of their employees. OSHA has recognized the need to remove oil from the environment and has empowered the OSHA representative to the RRT to reduce the training requirement to a minimum of 4 hours for responders engaged in post-emergency response operations. An example of a post-emergency response effort is shoreline cleanup operations. The reduced training applies to all USCG and other government personnel and to the private sector. This information may be found in OSHA Instruction CPL 2-2.51. The level of training required depends on the potential for exposure. Workers required to use respirators must have 40 hours of off-site training. The OSHA field compliance officer should be contacted to ascertain the worker training requirements and develop an implementation plan to minimize the hazards of exposure to workers involved in cleanup operations. State requirements that are more restrictive will preempt federal requirements.

The following link is an excellent OSHA publication, <u>Training Marine Oil Spill Response Workers under OSHA's Hazardous Waste Operations and Emergency Response Standard</u>. This document provides specific training requirements for spill responders during both the emergency response phase as well as the post-emergency response cleanup phase.

Within the State of Alaska, hospital decontamination stations have been established at a few hospitals. Field decontamination is critical prior to transporting injured workers to a medical facility.

# 2210 - Safety Officer

For most spills, a Safety Officer will be designated by IC. The Safety Officer will be responsible for ensuring that the spill site is properly characterized, the hazards identified, and personnel properly equipped and adequately briefed prior to allowing entry into the spill area. The Safety Officer will also be responsible for ensuring site security and establishing emergency procedures for decontamination and evacuation in the event of injury or change in conditions. The Safety Officer answers directly to the Incident Commander and will have the authority to suspend any operation deemed unsafe or in violation of safety regulations.

Personnel Protective Equipment (PPE) requirements will be determined by the Site Safety Officer. Response personnel should report with the proper initial issue of Level D PPE. Additional equipment for replacement issue must be provided by the responsible party or the contracted response organization.

## 2220 - Site Safety Plan Development

Once the emergency response is under way, the Safety Officer will develop a Site Specific Health and Safety Plan that will address all the required elements in OSHA's Hazardous Waste Operations and Emergency Response Regulations (29 CFR 1910.120), including but not limited to:

- Organizational Structure
- Training Requirements
- Risk and hazard analysis for each planned cleanup activity
- PPE
- Site Security and Control
- Air Monitoring, Medical Surveillance
- Decontamination
- Emergency Response Plan
- Emergency Communications
- Sanitation and Lighting

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Several example site safety plans are available on <u>the USCG Homeport website</u>, <u>under Incident Management</u> and Preparedness.

## 2230 - OSHA Training for Volunteers - TBD

#### 2300 - INFORMATION

## 2310 - Protocol for Access/Timing of Media Briefings

2310.1 – Public Information Office (PIO) Protocol

Oil and hazardous substance spills generate a great deal of public attention and media coverage, particularly if a spill is large or the substance spilled is extremely hazardous. This attention, reflecting legitimate public concern, may be local, statewide, or even national or international in scope.

Public affairs specialists or information officers keep the public and the news media informed about the facts and current situation of an incident and of the activities of the response effort and the agencies and officials involved. The Public Information Officer (PIO) of the Unified Command's Incident Command System organization serves as the lead manager for all spill-related public information activities conducted on behalf of the Unified Command or an On-Scene Coordinator (OSC).

Under the direction of the State OSC, the ADEC Public Information Officer serves as the lead manager for all spill-related public information activities that fall under State jurisdiction and will maintain a State public information office, as needed.

In the event of a major incident, the Unified Command in consultation with the PIO may choose to establish a Joint Information Center where public affairs professionals from organizations involved in incident management activities can co-locate to perform critical emergency information, crisis communications, and public affairs functions.

The Public Information Officer (PIO) is the communications coordinator, and often the spokesperson for the agency or organization they represent. The PIO is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. PIOs handle organizational functions, including media, community, industry, governmental, tribal, and interest group relations. They do more than "tell their organization's story." They must understand the attitudes and concerns of the community, public interest groups, and other responding agencies; establish; and maintain cooperative relationships with them and with representatives from print and broadcast journalism.

The PIO has three principal responsibilities:

- 1. **Gather incident data**. This involves understanding how an ICS/Unified Command response operation functions, then developing an effective method for obtaining up-to-date information from appropriate ICS Sections.
- 2. **Analyze public perceptions of the response**. This involves employing techniques for obtaining community feedback to provide response agencies with insight into community information needs, their expectations for the role to be played by the response agencies, and the lessons to be learned from specific response efforts.
- 3. **Inform the public**. That is, to serve as the source of accurate and comprehensive information about the incident and the response to a specific set of audiences.

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The PIO drafts press releases and contacts people in the media who might print or broadcast material or information. The PIO must show creativity, initiative, and good judgment and have the ability to communicate thoughts clearly and simply. The PIO can operate from an office or from the field. During an incident, the PIO serves under the Unified Command and often can be identified by a helmet or vest with the letters "PIO" on it.

**Staff and Resources**: Experienced crisis managers know that when public information officers are needed, the need can be critical, and the Unified Command's or the OSC's effectiveness with the media and public is often in direct proportion to the PIO's experience and training in complex environmental emergencies. Effective communication with the public is indispensable to a successful spill response.

Arriving at a spill site, the information officer must ensure that an officer/recorder is assigned from the professional spill response staff to assist in recording and transmitting written information. The staff person is responsible for writing a "spill bulletin" summarizing salient facts and information about the incident. The bulletin is transmitted, on a frequent basis and usually by Fax, to ADEC's Central Office in Juneau, the Governor's Office, communities, Native groups, resource organizations, the media, and federal agencies (as appropriate). The information contained in the bulletin will prove useful to the information officer, as well.

Additional information officers and clerical staff should be added to handle the increasing workload, as should photographic services, both still and video. Resources required for the spill information office include suitable maps of the impacted area, up-to-date media and community contact lists, dedicated phone lines, portable phones or beepers, if available, computers for all writers on staff, printers, a copier, and a fax machine. An advance agreement should be made with the Unified Command that photos and video footage shot for public information may be used for that purpose, without delay or restriction for legal reviews, except when such is warranted due to private property concerns.

**Staying Ahead of Changing Events:** One of the PIO's precepts for day-to-day effectiveness is to stay ahead of the "information curve." During a rapidly changing emergency, this will become one of his or her most exacting challenges. Not only must this person assemble information quickly, arrange interviews and assist reporters, but he/she also must maintain close contact with the OSC and spill team members to anticipate, as much as possible, each major development in the spill response that will generate the next wave of public concern or media interest.

These events may come in the form of escalated response actions, the release of new water sample data or wildlife mortality figures, or a formal decision delivered by a member of the Unified Command or others serving in an official capacity. When events such as these can be anticipated, press information can be prepared to enable the OSC to maintain his/her role as the primary responsible spokesperson for the incident. Additionally, the information officer must work within media deadlines as much as possible. Much of the national news media is driven by East Coast deadlines, a full four hours ahead of Alaska, and this may require special attention. It is a simple fact that information delivered prior to deadlines will be more effectively reported by the press.

To stay ahead of changing events and to meet deadlines, the PIO must assimilate a mass of information by coordinating with local government officials and federal, State, and responsible party public information staff, attending staff meetings, reading situation reports, and asking many questions. All of this consumes time. Sufficient staff support and resources in the spill information office or Joint Information Center is essential for answering phones, writing and dispensing bulletins, and hosting the press. Obtaining staff resources is thus one of the PIO's first duties upon arrival at a spill site.

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**Community Relations:** Providing information directly to members of the impacted community, free of the filtering and potentially distorting effect of the media is critical to public understanding of the incident response. Community relations may include scheduling of public meetings, preparing speeches, and coordinating public activities with public officials and protocol personnel.

In order to ensure that important constituencies are not overlooked or slighted during a major response, it is important that a Community Relations/Liaison Officer coordinate closely with the public affairs element. (Under no circumstances should community relations be a collateral duty of the media relations officer or the Joint Information Center during a major incident).

Additionally, the PIO should contact local government officials and have them offer information and comments on the situation. State, federal and local governments should coordinate their responses and press releases to the media.

**Internal Information:** Internal information is the process of properly informing internal staff of the status of all pertinent activities. By keeping staff apprised with information that is accurate and consistent, efforts to properly inform the rest of the response community will be successful.

At a minimum, all personnel assigned to response duties should be provided with access to the daily fact sheet or any published spill bulletins prepared by the PIO or the JIC. This will help ensure a consistent and accurate flow of information.

2310.2 – PIO Checklists

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# 2310.2.1 – General Checklist:

In response to a spill incident, as a member of the Unified Command Staff, the PIO will seek to perform the following:

Obtain briefing from the Incident Commander.
Prepare initial information summary, obtain Unified Command approval, and release for dissemination
as soon as possible after arrival.
In consultation with the Unified Command, establish a Joint Information Center, if warranted; manage
the activated Joint Information Center.
Arrange for necessary workspace, materials, telephones and staffing.
Observe constraints on the release of information imposed by the Unified Command.
Release news to media and post information in command post and other appropriate locations.
Ensure a consistent message is offered in all press releases, fact sheets, interviews and other public
information forums.
Attend all pertinent meetings to update information releases and situation reports.
Screen visiting journalists and VIPs and arrange escorting when appropriate.
Respond to special requests for information.
Organize opportunities for media interviews, site visits, etc. during incident.
Establish a press area, if deemed necessary, distribute passes, and ensure periodic contact with the
media in the press area, using established time intervals, if applicable.
Supervise the conduct of any outside news media, responding only with those details of the situation
as authorized by the Unified Command. Establish the "ground rules" that are determined necessary by
the incident commander given the seriousness of the situation.
Respond to all telephone inquiries from news media, local residents and other in a timely manner.
Standardize all forms of new releases and reports.
Maintain a written log of all information received from the Unified Command and relayed or released
on their authorization.
Prepare a final written news release for distribution to the media with approval of the Unified
Command.

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## 2310.2.2 – State of Alaska Checklist:

No two emergencies are identical. Each event will challenge the public information officer's skills in communication, organization and diplomacy. This individual must design the best information response possible, flexibly and creatively, to meet the given situation. The following checklist, intended as an aid to the basics, is offered as a starting point:

## **Pre-planning:**

- 1. Maintain up-to-date information on the major facilities in the State. Include a file of relevant facts on the industries and the major environmental and public health resources near facilities.
- 2. Review major oil and hazardous substance transportation routes and examples of vessel and facility contingency plans.
- 3. At both the PIO's home and office, keep a kit with communications information for Alaska locales, including community and media contact lists.
- 4. Participate in spill drills.

## At the Scene

- □ Coordinate with the SOSC and spill response team.
- □ Make all notifications as needed:
  - o ADEC information officer in Commissioner's Office
  - Governor's Press Secretary
  - ADF&G Public Information Office and other State agencies as needed (ADNR, ADMVA/DHSEM, ADHSS)
  - o USCG or EPA Press Officers; and
  - o RP's press officer or press spokesperson
- Identify Liaison Officer/Recorder and determine when first Spill Bulletin will be released.
- Initiate first press release with basic facts on spill; distribute as soon as possible.
- □ Identify additional staffing, office, and equipment needs, if any, and submit to SOSC or office administrator.
- □ Open communication channels with local government officials of affected communities; assist SOSC in keeping local community leadership informed.
- □ Login press calls, record names, phone and fax numbers of reporters.
- □ Activate video and still photography team.
- ☐ Arrange to obtain maps from mapping team, with regular updates.
- □ Work with SOSC to set up first press briefing.
- □ Attend key staff coordination and update meetings.
- □ Identify where reporters and TV crews may go and, if necessary, assist them in getting there.

## **News Briefings**

- □ Coordinate with OSC: who will be spokesperson(s), subject matter to becovered, other state staff required, backup materials, time limit.
- □ Develop list of probable questions for SOSC.
- □ At beginning of briefing, introduce yourself and speakers, give titles and spelling of names, indicate subject matter to be covered.
- □ Note or tape questions and answers for follow-up.

# Type of Information for Release

- Names and contact phones to obtain information on the spill.
- Exact location of the incident, including the proper name of the site, commercial entity name.

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- Time and date of incident.
- Type of substance spilled, nature of incident (fire, explosion, oil spill, etc.), and size, and effects to date on humans or resources. For any casualties, withhold names pending notification of next-of-kin.
- Actions taken or recommendations by the Unified Command for actions to respond to the incident. If appropriate, obtain quotes from the Unified Command officials regarding actions needed.
- Resources in area that could be at further risk, including human risks, and information needed by the public for self-protection.
- How the Unified Command is coordinating efforts with local communities and residents.

: Information released publicly during an incident may be used in later litigation. When in doubt, secure advice from the legal authorities. In general, adhere to the following:

- Do not speculate about the facts. "I don't know but I'll find out" is sometimes the best answer.
- Do not make damage estimates in terms of dollars nor confirm estimates made by persons other than those serving in an official capacity in the spill response operation.
- Withhold names of casualties pending notification of next-of-kin.

: When the crisis has subsided and media interest abated, the Unified Command's public information staff, and local government officials, as appropriate, should meet to evaluate their effectiveness with the media and the public.

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#### 2310.2.3 - USCG Checklist

- Designate an incident Public Affairs Officer. This person may change with time from a unit officer to a PIAT CWO to a District officer to a senior officer from another command. Make sure all PAs know whom the PAO is and understand that the PAO reports to the OSC.
- □ Complete fact sheet and prepare a 30-second media statement (about 150 words maximum).
- □ Record media statement on Voice-mail, record-a-phone or similar automatic message service so media can get updates.
- □ Use phone-screening system (watch standers, automated, etc.) to direct news media to prerecorded updates.
- ☐ Have three phone lines available for public affairs use: incoming (published), outgoing (unpublished), and a fax line.
- Contact district (District Public Affairs or DPA) at outset of any medium or larger spill to arrange for PA backup. Temporary Active Duty (TAD) PAs may be used or referral of media calls to DPA or some variation.
- □ Contact NSFCC, PIAT to alert in case of any potential major incident (if not already done as part of #5 above). Note: FOSC may request PIAT assistance at any time regardless of spill size.
- □ Update fact sheet at least daily and fax or phone update to major media outlets.
- □ Schedule a media-availability meeting with the FOSC, at least daily when media interest is great (if unsure of necessity, ask reporters; they will tell you whether the story merits the meetings).
- □ The primary purpose of a news conference/media-availability meeting is to put forth the FOSC's assessment of the progress of the response. A secondary purpose is to answer media questions. Use the Fact Sheet as the primary tool for briefings.
- ☐ In major spills, designate a protocol office to handle VIP visitors. Do not assign this function to the PAO.
- □ In major spills of high interest, designate an FOSC aide. Access to the FOSC and the FOSC's time is critical in such incidents and must be scheduled carefully.
- □ Require the PAO to brief the FOSC each morning on the media coverage of the incident and the specific public affairs goals for the day. The FOSC should update the fact sheet at this time.
- □ Establish a Joint Information Center (normally dictated by the size of the incident.) Only the FOSC or the FOSC's spokesperson speaks for all agencies, but each agency can speak for itself.

## 2320 – Joint Information Center (JIC)

During a major oil spill where media activity is expected to last several days, the Unified Command should task the PIO with establishing a Joint Information Center to coordinate the public affairs activities of participating agencies and parties. A Joint Information Center (JIC) is a co-located group of representatives from local, state, federal and private organizations designated to handle public information needs during an incident or event. The JIC is designed to fit naturally into the incident command structure and can be customized to reflect the size of the incident or event, expanding or contracting to meet the needs of the incident. Establishing a JIC under the Incident Command System is the most effective means of meeting information requirements and can make the difference between the public perceiving the incident to be under control or out of control.

Because of the critical nature of providing emergency information, time spent getting organized rather than responding at the time of an event can lead to confusion and a loss of public confidence. Through a JIC, agencies involved in a response can work in a cohesive manner, enabling them to "speak with one voice." By maintaining a centralized communication facility, resources can be better managed and duplication of effort minimized. The use of a JIC allows for tracking and maintaining records and information more accurately—therefore, improving the ability to conduct post-incident assessments, which can be used to improve crisis communication and general response activities during future incidents. JIC personnel should

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wear either identifying clothing or badges so they are readily identifiable by responders and members of the media and the public.

The objectives of a JIC should include:

- Developing, recommending, and executing public information plans and strategies on behalf of the Unified Command.
- Gaining and maintaining public trust and confidence
- Being the first and best source of information.
- Gathering information about the crisis.
- Ensuring the timely and coordinated release of accurate information to the public by providing a single release point of information.
- Providing multiple phone lines for incoming calls, manned by knowledgeable individuals.
- Ensuring State and federal government public affairs representatives are available to the media.
- Issuing press releases to the media and providing copies to response officials.
- Scheduling and coordinating news conferences and media briefings.
- Providing the responsible party (spiller) an opportunity to coordinate their media efforts with those of the Federal and State On-Scene Coordinators.
- Developing and maintaining a Unified Command website on the Internet to keep the public informed on the status of response activities.
- Capturing images of the crisis in video and photos that can be used by the response organization as well as the media.
- Monitoring and measuring public perception of the incident.
- Informing the Unified Command of public reaction, attitude, and needs, and advising the UC concerning public affairs issues that could affect the response.
- Ensuring the various response agencies' information personnel work together to minimize conflict.
- Facilitating control of rumors.

When possible the JIC should be kept separate from the Command Center; this provides greater control of information flow without disrupting response operations. Equipment needs for the JIC will vary depending upon the size of the incident, but most always will include the acquisition of phone lines, fax machines, copiers, computers, and printers.

## Joint Information Center Planning Considerations

The following list of questions provides a starting point in determining priorities in establishing a JIC and organizing the appropriate resources to fulfill those needs:

## First Steps - Initial Phase

- What is the status on the situation? Obtain a situational briefing and gather accurate information such as what happened, when, where, how, and who was involved/affected? Get as many specifics and details as possible
- 2. How, where, and what resources are needed to establish a JIC? What type/size of a JIC will need to be established and where will it be located? What staffing, equipment, supplies and other resources will be needed to effectively establish and run the JIC?
- 3. Who needs to be involved in the JIC? Who are the key responding agencies? How quickly can they send a representative to participate and provide input on public communication decisions?
- 4. What are the initial priorities and objectives for the JIC? What are the initial priorities and objectives in responding to the event, how will they be accomplished, and who needs to be involved?

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- 5. Which JIC functions will need to be activated? What functions and units should be activated? Do units need to be physically located together or can they function virtually via phone/web/email? Determine the best way to organize the operations, then fill out the JIC organizational chart appropriately.
- 6. Are there gaps that need to be filled? What additional information must be gathered or verified, and what additional resources will be needed?
- 7. Who are the key audiences? Identify the key audiences that need to be communicated to: affected stakeholders, public, key officials, and media? They should be communicated with regularly, so begin to set up a system to do that.
- 8. What are the key messages to be communicated? Identify no more than three key messages and determine which messages relate to which audiences best. What are the risks and the actions needed that need to be communicated about?
- Determine if there are any issues of confidentially due to the Health Insurance Portability and Accountability Act of 1996 (HIPPA) or criminal investigations related to the event. The members of the media often have a problem with confidentiality. However, when it comes to medical or criminal information there are things that cannot be legally disclosed. Explain this. Use good judgment.

## Second Steps - Operational Phase

- 1. What are the Media Relations Objectives? Determine media relations objectives and top priorities, and assign a lead.
- 2. What are the Research / Writing Objectives? Determine content objectives and priorities; assign a lead.
- 3. What are the Special Project Objectives? Determine special projects objectives and priorities are and assign a lead.
- 4. Are there any new or changing priorities? If there are changing or new priorities, what needs to be readjusted to meet those needs?
- 5. What information has changed or needs to be updated? Are there rumors and misinformation that need to be addressed? Let the news media know if there are corrections to previously released information. If new or changed information arrives, let the media and other key stakeholders know.
- 6. Who are the subject matter experts? What internal resources/expertise can be called upon?
- 7. What is working and what is not working? Assess the efficiency and effectiveness of the JIC structure and work units to determine if any changes need to be made. Take note of challenges, issues, and successes for after-action reports.
- 8. What additional resources are needed to meet additional or increased demands? If additional resources are needed, can they be acquired or must reassignments be made to the current structure to meet increased demands?

## Third Steps- Demobilization Phase

- 1. What key issues are still outstanding and need to be resolved? Are there any outstanding issues that need to be addressed? Which issues need to be immediately resolved and which ones can be addressed later on the after-action plan?
- 2. Do you anticipate any post-event media activity? Assess public communication needs during a prolonged event and identify what resources can be deactivated and which ones need to remain operational.
- 3. What follow-up communications need to be made? Plan for updates or follow up communications and identify target audiences.

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4. Which units can be deactivated and which units need to stay operational? Determine which units can be deactivated and which cannot. Develop a phase-out plan.

**JIC Equipment and Supplies Considerations** 

- 1. Will the JIC be set up as a physical organization/ location or as a virtual JIC? First determine the set up for the JIC, whether that means physically working together in one location or working independently from separate offices.
- 2. How many tables, chairs and desks/work stations will be needed for the JIC? If you are setting up a physical JIC, what is the best way to organize the room and its functional units? Consider who needs access to what equipment, and which work units should be near each other.
- 3. What communication systems will be needed for the JIC? How many computers, laptops, printers, phones, faxes, and copiers will be need, including other operational equipment, such as projectors, white boards, etc.?
- 4. What office supplies will you need? What basic supplies will JIC staff need notepad, message pads, pens/pencils, markers, flip charts, staplers, clips, phone books, maps, etc.?
- 5. What technological equipment or technologies will be needed for the JIC? What type of technologies will be necessary to enable the JIC to work more efficiently: email set-up, shared network drives, websites, and electronic or virtual communication systems?

#### 2330 – Wire Services

Wire Services: The Associated Press (AP), United Press International (UPI), and Reuters wire services are regularly among the first to be contacted with breaking news since these services provide electronic media and newspapers with immediate information. A PIO will be well served to make early contact with the wire services.

NAME	ADDRESS	PHONE	FAX
Associated Press	750 W 2 <sup>nd</sup> Avenue, Suite 102 Anchorage, AK 99501	272-7549	274-2189
Reuters	3400 Purdue Street Anchorage, AK 99508	349-4588	

## 2340 - Newspaper Contacts

Print journalism often provides more in-depth coverage than television or radio and is sometimes more closely perused by decision-makers, legislators, community officials and other opinion leaders. While TV is viscerally powerful, its images are more fleeting than stories and editorials appearing in print. Thus, newspapers can have a longer-lasting effect, and, in a sense, newspapers write the "history" of an event -- at least in the public view.

NAME	DISTRIBUTION	ADDRESS	PHONE	FAX/EMAIL
Alaska Dispatch	Daily	1001 Northway Drive Anchorage, AK 99508	257- 4200	279-8170
Cordova Times	Weekly	P.O. Box 200 Cordova, AK 9574	424- 7181	
Fairbanks Daily News Miner	Daily	200 North Cushman Street P.O. Box 70710	456- 6661	

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		Fairbanks, AK 99707		
Turnagain	Weekly	P.O. Box 1044	783-	783-1136
Turnagain	vveekiy	Girdwood, AK 99587	1135	info@turnagaintimes.com
	The Valdez Star  Weekly  7.0. Box 2949  Valdez, AK 99686	310 Pioneer Street	835-	
The Valdez Star		P.O. Box 2949	2405	infor@valdezstar.net
		2403		

## <u>2350 – Television Contacts</u>

Apart from radio, TV is the most widespread news medium and, arguably, the most powerful due to its visual impact. It is the medium by which the greatest number of people will gain information about a significant spill and formulate their feelings. Therefore, this emotionally powerful medium can be a major influence on public opinion and a key to delivering the Federal/State and local position on the impact of a spill and how people and sensitive environmental and cultural areas are being protected from further damage. The PIO should focus on using this medium in three ways:

- 1. Facilitate TV interviews with the OSC or other appropriate spokespersons and cooperate with stations and networks for video crews to visit spill sites, accompanying them where possible, to obtain news footage in a manner that is safe and does not interfere with the spill response.
- 2. For a large spill, immediately activate a professional video team to shoot broadcast-quality footage from the first days of the incident and use the material for the Unified Command's own video reports on the spill. For a small spill, request field personnel to record spill events and response operations with issued cameras.
- 3. Use the video team's footage to produce video news releases on the most important issues and events of the spill and identify a distribution system to deliver these releases electronically to interested stations and networks. In addition, "B-roll" footage should be provided for stations to use in editing their own news pieces. The footage can be delivered statewide and nationally by satellite link. A private company may be contracted for production and editing, but the JIC may find it more expeditious to employ its own production personnel.

NAME	ADDRESS	PHONE	FAX/EMAIL	
KIMO-TV (Channel 13)	2700 East Tudor Road	561-	561-1377	
Kilvio-TV (Chailliel 13)	Anchorage, AK 99507	1313	301-1377	
KTUU-TV (Channel 2)	501 East 40 <sup>th</sup> Avenue	762-	News desk@ktuu.com	
K100-1V (Chailliel 2)	Anchorage, AK 99503	9260	<u>News_desk@ktud.com</u>	
KTVA-TV (Channel 11)	1001 Northway Drive, Suite 202	274-	comment@ktva.com	
KTVA-TV (Challilet 11)	Anchorage, AK 99508	1111	11news@ktva.com	
KUAC-TV (Channel 9)	P.O. Box 755620	474-	474-5064	
KUAC-TV (CHAIIIIEI 9)	Fairbanks, AK 99775	6700	4/4-3004	

## 2360 - Radio Contacts

This medium, especially public radio with its well-developed statewide and national networks, plays a more significant role in Alaska news perhaps than in other states. With public radio stations in a number of communities and efficient networking by Alaska Public Radio Network (APRN), radio represents an aggressive and professional news capability. Radio should receive equal notification and information during a spill response.

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NAME	ADDRESS	PHONE	FAX/EMAIL
	128 Pioneer Drive		
KCHU (Public Radio)	P.O. Box 467	835-4665	835-2847
	Valdez, AK 99686		
	501 E. Bremner Street		
KVAK (93.3 FM)	P.O. Box 367	835-5825	835-5158
	Valdez, AK 99686		
	Bayview Communications		
VI ANA (1450 ANA)	112 Forestry Way	424-3796	424-3737
KLAM (1450 AM)	P.O. Box 60	253-2255 cell	email@cordovaradio.com
	Cordova, AK 99574		
	Mile 187 Glenn Highway		
KCAM (88.7 FM)	P.O. Box 249	822-5226	kcam@kcam.org
	Glennallen, AK 99588		
	Bayview Communications		
VCDV (100.0 EM)	112 Forestry Way	424-3796	424-3737
KCDV (100.9 FM)	P.O. Box 60	253-2255 cell	email@cordovaradio.com
	Cordova, AK 99574		

#### **2400 - LIAISON**

Liaison Officers (LOFR) -- point of contact for affected communities, interest groups that do not have jurisdictional authority, landowners, leaseholders, RCACs, government agencies, and other groups of interested parties. Several Liaison Officers may be designated, depending on the level of coordination required. The LOFR coordinates with the Regional Stakeholder Committee, if one is activated.

## <u>2410 – Investigators</u>

The following are helpful resources for understanding and implementing the investigator role:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response.

## 2420 - Federal/State/Local Trustees

For incidents with significant effects or the potential for significant effects on Federal trust resources (e.g., critical habitat for threatened and endangered species), Federal trustees will have the option of providing input directly to the Unified Command to ensure information on these resources is available, and used appropriately, in decision making. This representative(s) would provide guidance on response and protection strategies commensurate with the special status of the affected or threatened lands or resources.

## <u>2430 – Agency Representatives</u>

The following are helpful resources for identifying and implementing the agency representative (AREP) role:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response.

## 2440 - Stakeholders

## 2440.1 – Regional Stakeholder Committee

A Regional Stakeholder Committee (RSC) will normally be activated for significant incidents that involve resources under the jurisdiction of several agencies. The RSC was previously referred to as the Multi-Agency Coordination Committee (MAC). Unlike the MAC defined in the ICS of the National Interagency Incident Management System, the RSC for a spill response does not play a direct role in setting incident priorities or allocating resources. The RSC can advise the Unified Command (under the guidance of the Community

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Liaison Officer) and provide comments and recommendations on incident priorities, objectives and action plans.

Figure 9 provides the general location of the regional RSC in relation to the Unified Command organizational structure. Additionally, the suggested/potential membership of the RSC is provided in Figure 9. Membership on the RSC is dependent upon the location of the incident and the interests or jurisdiction of the affected communities, landowners, and special interest groups. During incidents where there is no FOSC, federal agencies with jurisdictional responsibilities for resources at risk could participate as a member of the RSC, thus retaining their input on containment, oversight, and cleanup.

As indicated above, the RSC is not directly involved in tactical operations, though some of its members may be. The RSC's role is to convey to the Unified Command information relating to the authority, concerns and expertise of its members. RSC members recommend to the Unified Command overall objectives and priorities and review the Incident Action Plans.

RSC activities will be coordinated by the Community Liaison Officer. RSC discussions will be documented and recommendations and dissenting opinions occurring outside of RSC meeting with the Unified Command will be communicated to the Unified Command through the Liaison Officer. The RSC will be chaired initially by the Community Liaison Officer. After convening, the RSC will then elect its own chair.

FIGURE 2-1: PWS REGIONAL STAKEHOLDER COMMITTEE ICS ORGANIZATIONAL POSITION AND MEMBERSHIP



# Suggested Membership:

- Prince William Sound Regional Citizens Advisory Council
- Representatives or Community Emergency Coordinators from affected communities. These may include:

Chenega Bay

Cordova

Tatitlek

Valdez

Whittier

## Private landowners and leaseholders

- Federally-recognized tribes, Native corporations, organizations and communities
- Special interest groups affected by the incident

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\* The Local On-Scene Coordinator is part of the Unified Command and the Incident Commander during an incident as long as there is an immediate threat to life, health and safety. The LOSC may also be part of the Unified Command during incidents which occur within the local jurisdictional authority and/or where significant local resources are committed to the response.

## 2440.1.1 – Regional Stakeholder committee Process

Earlier in this plan, it describe the roles of the local and Tribal governments and other potential stakeholders in spill response and the requirement that they be kept closely involved. The Regional Stakeholder Committee (RSC) is intended to fulfill that purpose.

#### **General Guidelines for the RSC:**

- The term "stakeholder" is so broadly defined, any system dealing with stakeholder issues and information should be designed to accept input from anyone in the spill-affected region.
- Regional and local Tribal leaders and elected officials are the primary representatives for all stakeholders and offer the best access to ensure full local representation.
- There are stakeholders that transcend municipal or Tribal boundaries. There are also non-governmental groups that may be represented by an entity such as the Cook Inlet Regional Citizens Advisory Council (CIRCAC). Other stakeholders will have the option of going through an RCAC or their local official.
- The members of the RSC need to be empowered by their constituents to make decisions and prioritize.
- The RSC members need frequent contact with their constituents. Frequent public meetings chaired by the RSC members for their respective communities are critical to ensuring all are heard.
- The RSC should have direct access to the Unified Command. Their input needs to be considered during
  the planning cycle. However, the Unified Command can commit limited time (usually less than 1 hour
  per day) to directly deal with the RSC.
- Many of the RSC issues can be addressed by effective communications with the Unified Command through a process that is incorporated into the planning cycle.
- Support of the RSC is a Unified Command responsibility and can be shown by supporting local meetings, as well as fostering communication and coordination to help organize RSC input, routing it to the proper channels in the response organization or the Unified Command.

RSC coordinators in the Unified Command would support RSC members and the Community Liaisons. Coordinators could include representatives from the Unified Command (USCG or EPA, ADEC, RP), and the RCAC (if the RCAC is involved). Each coordinator will administratively work with his or her respective organization.

RSC membership consists of the Tribal council leaders and mayors/city councils, or their designees. Native Corporations would provide a representative as a third member from a convenient community of their choice. If a community leader chooses to be represented by an RCAC designee, the respective RCAC Board member may be a logical choice, if an RCAC exists for the area. These community leaders will appoint a representative to be located with the IMT who will be that community's spokesperson to the Unified Command.

Where an RCAC exists, the RCAC will be invited to appoint a representative on the RSC to collect input from:

- Alaska State Chamber of Commerce
- Alaska Wilderness Recreations and Tourism Association

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- Oil Spill Region Environmental Coalition
- Aquaculture Corporations
- Commercial Fishing Organizations
- Other individuals not using their local representative

Environmental groups may either input their information through the nearest community RSC representative or the RCAC representative.

#### **Information Flow Process**

An organization that best meets the criteria and constraints is one that directly connects each day with the Unified Command. The response organization must be ready and able to accept and consider the input from the Regional Stakeholder Committee.

The Unified Command will provide the RSC members and their representatives with:

- The Incident Action Plan (IAP) on the same day it is approved.
- All JIC produced information.
- Responses to information or questions provided by the RSC.
- Direct access to the Unified Command on a regular basis.
- Support to the RSC members and their IMT representatives in the conduct of their responsibilities.

Using their representatives, the RSC provides the Unified Command the following information obtained during daily meetings with their constituents:

o *Issues of local interest and concern*: Of particular concern to the Unified Command are issues of an immediate nature. These should be highlighted.

## o Resources:

- Available to assist with response activities: These include: workers and support personnel; communications equipment or systems; hotel and berthing facilities; heavy equipment; aircraft support; harbor facilities; machine shops and repair facilities for vessels and equipment.
- Needed in the local area: For example: spill response equipment (booms, skimmers, etc.), staples, and food needed to replace lost subsistence sources or support a large influx of workers. Of particular concern to the Unified Command are resource needs of an immediate nature. These should be highlighted.

## • Cleanup assistance:

- o Available to assist with response activities.
  - These include: personnel with special expertise; and unique spill response equipment. The UC would be particularly interested in contacting personnel with local knowledge to assist with collection tactics, wildlife behavior and safe navigation.
- Needed in the local area to conduct response operations. Of particular concern to the Unified Command are cleanup needs of an immediate nature and sensitive area identification. These should be highlighted.

There will be a need for extensive communication between the RSC coordinators and the representatives of the RSC, as well as between RSC members, as information is compiled and questions are answered. Additionally, the RSC coordinators will assemble and deliver information and requests to the proper sections of the incident management team.

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The RSC representatives will deliver the information to the Unified Command during an afternoon meeting. If members of the Unified Command must leave before the meeting is complete, or cannot make the meeting, the RSC coordinators will represent their respective part of the UC until the discussion is over.

## **Timeline of Activities**

A cycle of work that spans the interface between two adjacent operational periods allows an opportunity for constituent contact; issue reconciliation / prioritization; and optimization of the direct UC contact time. A recommended work cycle is provided as follows:

Time Period	Activity
When approved	RSC coordinators distribute to RSC members and their representatives: the IAP, information from the JIC, and any responses to previously submitted questions or concerns.
Late afternoon or other time as determined	Public meetings or other locally determined method that allows individual stakeholder input to the RSC members for that community.
within the	Information from this process is faxed or emailed to the RSC representatives and the
community	coordinators prior to midnight.
AM next day	RSC coordinators work with the RSC representatives to define and resolve issues and answer questions raised by constituents. The coordinators help the representatives prioritize issues, route information to the proper staffs in the IMT and prepare the representatives and the UC for the afternoon meeting. This work will provide rapid feedback to the communities, timely input to the planning cycle for the IAP, and a reduction in the volume of issues to be presented directly to the UC.
PM	The coordinators brief and prepare the UC for the RSC meeting.  The meeting with the UC will last approximately 1 hr.

# Responsibilities:

#### Regional Stakeholder Committee Members

- Establish a system that allows local stakeholders to provide input. Local stakeholders can be landowners and resource users of any description. The goal is to include all local interested parties to ensure ideas and concerns are heard. After the first meeting, the system would provide feedback and answers received from the UC.
- Assemble and prioritize the input into the three areas: issues; resources; and cleanup assistance.
- Ensure their representative receives the community input.

## RSC Representatives in Communities

- Receive community information from their RSC member.
- Work with the coordinators to clarify issues and participate in the UC meeting.

<u>RSC Coordinators</u> - The coordinators are located at the emergency operations center or incident command post.

- They support the RSC members and representatives to ensure their needs, concerns and information are passed to the appropriate part of the IMT organization.
- Issues and information provided by the RSC is inserted into the planning cycle for consideration.
- The coordinators highlight issues to the Unified Command to ensure appropriate attention is given to critical matters.

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<u>Liaison Officer</u> - The liaison officer will assist the RSC members with the performance of their duties by obtaining resources and coordinating, as necessary.

Type of Information	Coordinators Route to:
Issues of concern	JIC, Unified Command and the Operations and Planning Sections
Resources available	Logistics Section
Resources needed	Operations, Planning and Logistics Sections
Resources needed - urgent	Operations, Logistics Sections
Cleanup assistance available	Operations, Planning and Logistics Sections
Cleanup assistance needed	Operations, Planning and Logistics Sections
Urgent cleanup assistance needed	Operations and Logistics Sections
Sensitive area information	Environmental Unit
Questions on cleanup techniques	JIC, Environmental Unit, Operations Section

## 2440.2 - Environmental

The following website, "Alaska Citizens' Workshop" provides a listing of environmental interest groups in the State of Alaska: http://www.alaska.net/~jrc/alaska.html

#### 2440.3 – Economic

Reference the Community Profiles for community specific economic stakeholders

2440.4 - Political (local, state, etc.) - TBD

## 2450 - Natural Resource Trustees

List of the natural resource trustee emergency contacts is maintained on the <u>Alaska Regional Response</u> <u>Team website</u>, under "Members and Contacts."

## 2460 – Natural Resource Damage Assessment (NRDA)

NRDA activities, which are performed under the direction of natural resource trustees, typically are conducted concurrently with response activities, which are under the direction of the Unified Command. If necessary, trustees will make a NRDA representative available to the Unified Command at the incident command post to coordinate NRDA field actions with response activities. The role of this NRDA liaison is to provide a linkage between NRDA activities being conducted by trustee representatives and response activities being conducted by Federal, State, Local, and RP OSCs.

2500 - RESERVED

2600 - RESERVED

2700 - RESERVED

2800 - RESERVED

2900 - RESERVED FOR AREA/DISTRICT

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#### 3000 - OPERATIONS

#### 3100 - OPERATIONS SECTION ORGANIZATION

The number and types of branches and divisions/groups are situation-dependent. For a major oil or hazardous substance release, the USCG has pre-designated branches and divisions/groups with formal tasking and objectives. Specific guidelines for these staff positions are included in <a href="The USCG Incident Management Handbook">The USCG Incident Management Handbook</a>. The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response identifies the key functions within the operations section, but does not pre-designate branches, divisions, or groups. The nature and gravity of the incident will dictate the desired response structure to be established within the operations section.

## 3110 – Organization Options

<u>The USCG Incident Management Handbook</u> is an excellent reference for hazard-specific organization options for the Operations Section.

## 3120 - Considerations for Building the Operations Section-TBD

## 3200 - RECOVERY AND PROTECTION

## 3210 - Protection

For protection techniques and operations, reference the following:

- The Alaska Department of Environmental Conservation (ADEC) Spill Tactics for Alaska Responders (STAR) Manual
- The Alaska Clean Seas Technical Manual

## 3220 - On-Water Recovery

For on-water recovery techniques and operations, reference the following:

- The Alaska Department of Environmental Conservation (ADEC) Spill Tactics for Alaska Responders (STAR) Manual
- The Alaska Clean Seas Technical Manual

## 3230 - Shoreside Recovery

## 3230.1 – Shoreline Cleanup Options

Shoreline cleanup strategies are diverse and will depend on a number of factors including shoreline type, spilled oil properties, extent of contamination, prevailing weather conditions, tidal fluctuations, sea conditions, accessibility by shoreline cleanup crews and equipment, etc. The Unified Command will determine the best available options for cleaning impacted shorelines based upon these factors.

There are several worthwhile documents that can be used as reference documents for shoreline assessment and cleanup. These include the following:

- "The Arctic SCAT Manual, A Field Guide to the Documentation of Oiled Shorelines in Arctic Regions,"
   Environmental Canada (July 2004)
- "Alaska Clean Seas Technical Manual Volume 1; Tactical Descriptions," Alaska Clean Seas (2016)
- "Alaska Shoreline Countermeasures Manual," NOAA (April 1994)
- "Circumpolar Field Guide for Oil Spill Response in Arctic Waters," Environment Canada (1998)
- "Guide to Oil Spill Response in Snow and Ice Conditions in the Arctic," EPPR (2015)

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- "Tundra Treatment Guidelines, A Manual for Treating Oil and Hazardous Substance Spills to Tundra 3rd Edition," ADEC (2010).
- "Shoreline Assessment Job Aid," NOAA, (2007)
- "Characteristic Coastal Habitats Choosing Spill Response Alternatives," NOAA, (2017)
- "Shoreline Assessment Manual," 4th edition, NOAA (August, 2013)
- Arctic Shoreline Clean-up Assessment Technique (SCAT) Manual, EPPR, 2004. Additionally, this website
  provides information on useful spill response data as noted below.
  http://www.asgdc.state.ak.us/maps/cplans/geographic zones.html
- Environmental Sensitivity Index (ESI) Maps (which identify shoreline types). ESI Maps (for coastal areas of the State) have been developed for all geographic zones within this Arctic and Western Alaska.

# Land Management Maps

- Geographic Response Strategies
- Most Environmentally Sensitive Area (MESA) Maps
- Biologically Sensitive Area Maps
- Aguatic Farms
- Regional Maps (USGS Quadrangles, NOAA Nautical Maps)
- Alaska Oceanographic Circulation Diagrams and Graphics

3230.2 - Pre-Beach Cleanup-TBD

3230.3 – Storage

The Alaska Department of Environmental Conservation (ADEC) Spill Tactics for Alaska Responders (STAR) Manual provides guidance for land and marine based storage options.

## <u>3240 – Disposal</u>

The Planning Section Chief will be responsible for developing a waste removal and disposal plan that provides the necessary logistical and procedural information to ensure a fast and efficient transfer of wastes to disposal facilities. The disposal plan must be in compliance with existing laws and regulations.

Oversight of the waste disposal plan will normally be the responsibility of the State of Alaska. Alaska law (18 AAC 75.319 & 18 AAC 75.327) requires that cleanup and waste disposal plans for hazardous substances, including oil, be approved by ADEC.

Note: Within PWS Area, there are limitations, though not as severe as other locations within Alaska, on the amount of temporary storage available for waste products and recovered product resulting from an oil spill.

## 3240.1 – Waste Management and Temporary Storage Options

The term "waste" is used throughout this document. It is used for identifying the types of materials that are generated as the result of a spill and spill cleanup, and is not used to define these materials for purposes of state and federal solid waste and hazardous waste statutes and regulations. To formally confirm that these materials are not considered wastes in the regulatory use of that term and to optimize the management of these materials in a safe and environmentally responsible manner (e.g., recycling of recovered crude oil), the following definition is used for purposes of this document: "waste" means materials that are generated as a direct result (e.g., recovered crude oil) and the indirect result (e.g., refuse, sewage, and hazardous wastes) of an oil spill; "waste" for these purposes does not mean "solid waste" as defined by Alaska (AS 46.03.900(5) and 18 AAC 60.910(53) and federal (42 U.S.C. § 6903(27)) laws.

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WASTE STREAM IDENTIFICATION NUMBERS			
OILY WASTE	WASTE STREAM NUMBER*		
Fresh Oil	101		
Weathered Oil	102		
Emulsion	103		
Hydraulic Fluids	104		
Beach Debris	105		
PPE	106		
Sand/Soil	107		
Sorbents/rags	108		
Oily Wastewaters	109		
Carcasses	110		
OTHER WASTE			
Domestic Wastes	201		
Debris	202		
Pallets	203		
Paperboard	204		
Drums	206		
HAZARDOUS WASTES	301		

<sup>\*</sup>Note: The numbering system depicted here is one of several possible methods to categorize waste materials to facilitate tracking and eventual disposal.

## 1. PROCEDURES FOR TRANSPORTATION, STORAGE, AND DISPOSAL:

Temporary waste storage areas will be strategically selected and located as points of accumulation and temporary storage for oil spill related wastes. These temporary storage areas can be located at recovery sites, or they make take the form of longer term storage at more permanent facilities. Waste generated by response efforts will be stored at these areas pending waste characterization, final identification of disposal options, and placement of contractual arrangements with approved disposal facilities. Temporary waste storage areas must be approved by ADEC and the land resource trustee. It will be the responsibility of the RP to provide manpower and equipment required to transfer the wastes from the arena of operations to the storage areas and to fully operate these areas.

At the storage areas, wastes will be segregated into waste streams and stored in appropriate containers. In general, waste streams will not be mixed unless specifically directed by the Environmental Unit Leader. Later in the response effort, wastes may be forwarded under manifest directly from the point of generation to the disposal facility without the need for temporary storage.

**Liquid Wastes:** Liquid wastes recovered through skimming or washing operations will be accumulated in barges, portable tanks, bladders, drums, or other approved means and held pending waste classification and characterization. Each container must be labeled as to contents and provided with an identification number for tracking and accounting purposes. In most cases, water will be decanted (with State approval) to reduce the volumes of liquid wastes. Different classes of liquid wastes should not be mixed in the same containers without approval of the disposal officer.

If the recovered oil has not undergone significant weathering or emulsification and is free of foreign material, it can be transported to a refinery or oil terminal as a product rather than a waste. Oil that cannot

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be recovered in this way will be deemed a waste oil and subject to additional testing and handling requirements.

On vessels used for decontamination purposes, all oily wash water should be segregated from other wastes and stored on board the vessel for future transport to an identified disposal facility.

Oily water collected at boat cleaning stations should be segregated into the following four categories:

- Bilge waters
- Bottom liquids from cargo compartments or holds
- Oily deck and hull wash waters
- Oily hold wash waters

Oily wash waters from the cleaning of gear, boom, and equipment should also be segregated and stored separately. Used oil from gear and maintenance operations should not be mixed with any other liquids, but collected and stored in marked containers. Other liquid wastes, like hydraulic fluids, antifreeze and contaminated fuels, also should not be mixed, but stored in 55-gallon drums and marked as to their contents.

All unidentified liquid wastes should be labeled as such, segregated, and handled according to hazardous waste management standards (40 CFR 261) pending laboratory analysis for RCRA hazardous waste characteristics.

#### **Solid Wastes:**

Solid wastes should be double bagged and placed in portable dumpsters or shipping vans and transported to the temporary storage areas. Basic separation of like wastes should take place at this level. Clear, color-coded plastic bags may be used to segregate solid wastes for different disposal options. Solid waste that is too large for plastic bags will be segregated into properly marked dumpsters or shipping vans. Large spills may require a dedicated solid waste storage barge.

All dumpsters, shipping vans, or other means for storage of oily solid wastes must be lined with plastic sheeting prior to use. To control free liquid accumulation within the containers, an inner lining of oil and water absorbing fabric will be used. Additional granular sorbent material should be added as required to eliminate free liquids. For responses where oily debris is extensive and likely to accumulate rapidly, debris may need to be piled in vacant storage yards with a drainage system to collect any runoff, or in lined earth pits.

Oily PVC waste materials should be bagged and tagged to show contents. These bags should be segregated from other waste streams and transported to a storage area

Bird and animal carcasses should be bagged, tagged, and segregated. Tags should include location of the recovery. Bird and animal carcasses will be handled as directed by the appropriate authority.

## **Non-Oily Wastes:**

Non-oily waste (scrap materials, construction materials, etc.) and domestic garbage and refuse should be collected and segregated (according to the particular requirements of municipal or private waste process and disposal facilities) to prevent oil contamination and transported to storage or final disposal site.

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#### 2. WASTE HANDLING AND LABELING:

Proper waste handling, manifesting, custody transfer and labeling are important for the proper movement and documentation of all waste materials generated in an oil spill response. Wastes must be segregated according to the various types and must not be mixed. All segregated wastes will be properly labeled showing the type of waste in each container. For all unidentified wastes, they need to be labeled as such and segregated from the other wastes. All unidentified wastes/oils will be assumed hazardous until sample results are available. If a waste turns out to be hazardous, it will be handled and treated in accordance with current hazardous waste regulations.

**Records**: All waste oils, regardless of type, must be managed by a complete set of records. These records should show the following:

- Where the waste was recovered,
- The type of waste,
- Approximate volume,
- Date collected,
- Date transported to staging or disposal site,
- Date received at temporary storage area or disposal site,
- The number of containers shipped,
- The number of containers received,
- The date, location and method of final disposal.

To aid in the implementation of the records requirements, the following procedures are recommended:

- 1. Waste management activities should be conducted as secure storage areas set up at strategic locations.
- 2. Each load of waste departing the point of generation should be inspected and assigned to an internal waste stream matrix and inventory record.
- 3. A waste tracking form should be completed for each load of waste. Information required on this form includes date and time, transporter name, vessel of truck number, description of waste and generating process, the assigned waste stream number, and destination of the waste.
- 4. Waste moved to off-site treatment or disposal facilities are transported under the appropriate manifest with copies retained.
- 5. Once each day, a "waste management summary report" will be completed documenting the following daily and cumulative totals for each waste stream:
  - a. Waste received
  - b. Waste stored on site
  - c. Waste stored off site
  - d. Waste disposed by disposal facility

## 3240.2 – Disposal Options

The RP will be responsible for developing a waste disposal plan that provides the necessary logistical and procedural information for the transfer of wastes to disposal facilities. The disposal plan must comply with existing laws and regulations. Oversight of the waste disposal plan will normally be the responsibility of the ADEC.

An ADEC solid waste permit is required. Consult with ADEC on the landfill status and the current information on the adequacy of landfills. Currently, no approved hazardous waste disposal sites exist in Alaska. Municipal landfills in Alaska either no longer accept oily wastes or accept only lightly oiled soils.

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State regulation 18 AAC 75.130 requires that the final disposal of a hazardous substance including oil, be approved by ADEC. Oil spill reporting regulations 18 AAC 75.100 require that disposal information be provided within the oil spill report.

## 1. Short Term Management and Disposal Options for Liquid Wastes:

\_If a spill occurs, both oil and non-oily liquid wastes will be generated or collected during cleanup. This section describes short-term management and disposal options for oil and non-oily liquid wastes, including domestic wastewaters.

## **OILY LIQUIDS:**

Recovered oil and oily wastewater from spill-related activities will be stored on board tank vessels, in portable tanks, tank trucks, or in approved shore-side tanks where primary oil/water separation may occur. With State approval, on-site decanting may be allowed. After primary oil/water separation, one of the following disposal options will be used:

- Tender of recovered oil to the contracting vessel for offshore treatment;
- Transportation of recovered oil to a refinery or oil terminal for re-use as a product;
- Barging oily water to the continental U.S. for additional treatment or disposal, unless the spill fluid emanated from oil production facilities and can be recycled or disposed of at the original facility; or
- Barging heavily weathered and emulsified oils to the continental U.S. for treatment, additional oil
  recovery, and wastewater and solids disposal in a commercial waste management facility. Treatment
  facilities for these options are described below.

#### **Onshore Treatment Facilities:**

Crude oil recovered soon after a spill will generally be suitable for reclamation by a production facility or refinery. Because the chemical make-up of spilled oil changes as it weathers, it is less likely that oil collected during a long-term cleanup operation can be reclaimed. Oil that is emulsified, weathered and mixed with debris from the sea or from beach cleaning operations is a mixture of liquids and solids and requires special handling and treatment prior to disposal. There are currently no appropriate disposal options in Alaska for these emulsified wastes. Therefore, they must be stored on barges and shipped to appropriate waste handling facilities in the continental U.S. for treatment.

Oily wastewater, if associated with oil production or terminal facilities, can be treated and disposed of at those facilities (such as the Ballast Water Treatment Plant at the Valdez Marine Terminal) with the approval of EPA and ADEC. Laboratory analysis of these wastewaters may be necessary so that contaminants do not interfere with the treatment process. If particular oily wastewaters cannot be treated because of incompatible contaminants or inadequate plant capacity, those wastewaters will be taken to alternate treatment facilities (e.g., the tanker owner's refinery in the continental U.S. or a permitted bulk receiving facility). For certain wastewaters, physical chemical treatment methods (e.g., air stripping or granular activated carbon) may be preferred over biological treatment.

Contaminated wastewaters will require sampling, analysis, and possible pre-treatment before potential disposal in a municipal sewage treatment facility. EPA, ADEC, and municipal approval may be required. Any discharge into a municipal sewage system must meet EPA pre-treatment standards. If analysis indicates that wastewaters are hazardous, they will be shipped to a disposal facility in the continental U.S.

## **Offshore Treatment Facilities:**

The objective of any onboard treatment will be to reduce the water content of the liquid wastes or recovered product collected and transported by the vessel, thereby increasing the vessel's storage capacity.

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It is reasonable to assume that some primary phase separation could take place in the vessels being loaded with oily wastewaters. The accumulated water could be extracted, treated and, after the appropriate permits are obtained, discharged overboard.

Treatment facilities to be considered include:

- Screw pumps (very suitable for low and highly viscous liquids)
- Centrifuges (operation not affected by vessel movement)
- Gravel filters (operation not significantly affected by vessel movement)
- Dissolved air flotation (DAF) unit (effective in removing low concentrations of oil, but its operation can be affected by vessel movement)

The performance of the onboard treatment facilities can be enhanced by the use of emulsion breakers and flocculation agents. Care should be exercised to ensure that they do not become a source of pollution. Unless the tanker or vessel is anchored in a sheltered area, treatment can be impacted by inclement weather.

## **In-State Resources for Waste Treatment and Recycling:**

There are several facilities in the state that treat oily wastes or related materials. In general, however, operational or permit requirements limit the facilities' ability to handle recovered liquids.

Alaska Pollution Control is an oil recycling facility located in Palmer. The plant is currently accepting a variety of spilled and recycled refinery products, including lubricating oil, gasoline, diesel, and fuel oil. The products must be less than 1000 ppm total halogens and must not be hazardous waste by definition. Exact requirements must be verified prior to use of the facility, and the blended products must meet specifications for heating value. The products are processed and sold for use as industrial fuel. The plant does not accept crude oil for operational reasons, but does accept 10,000 to 20,000 gallons of water per week from spills and tank clean-outs. The water is processed and discharged to a Publicly Owned Treatment Works (POTW) under pre-treatment limits. Hydrocarbons recovered from the wastewater are processed in the same manner as the other products.

Various portable processes could be used to pre-treat waste before shipping to an oil recycling facility. In addition, it is possible to ship water that meets pre-treatment standards to a POTW. The acceptability of the waste will depend on its source and characteristics, as well as the volume. Each municipality has different requirements.

#### **Other Commercial Oil Recovery Methods:**

These technologies are not currently commercially available in Alaska, but they may be considered in the event of a spill. These methods include the following:

- Oil is heated to a temperature below its flash point and injected into sludge to dissolve the waxy and gelatinous deposits to facilitate their recovery.
- Gravity separation, chemicals, heat, lighter oils and solvents, and emulsion-breaking chemicals are used to thin heavier fractions.
- Coker units are used at refineries to dispose of certain types of sludge.
- Mixing different oil types to enable their processing may make variable angle mixers more efficient.
- A rotary vacuum filter, consisting of a horizontal drum with a filter media on its outer surface, is partially submerged and rotated in a tank containing sludge. A vacuum pulls liquid inward while retaining solids on the outside, which are then scraped off.

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- A scroll-type centrifuge rotating at 75-100 rpm forces solids against an inner bowl and on to discharge.
  High-feed rate and durability make this a popular item at refineries. The effluent still requires
  treatment and the solids produced might not be pumpable. Neither heat nor chemicals may be
  necessary to optimize the performance of two-stage centrifuges. Generally, centrifuges are operated
  only for 1-3 weeks at a time of 40-60% rated capacity.
- Gravity-belt filters press sludge between two moving belts and force out oil and water. These filters
  rely on the application of costly high molecular-weight polymers to coagulate sludge. Changes in the
  sludge, including pH and H<sub>2</sub>S emissions, can result in problems. This method, however, has been used
  for many years on biosludges in Europe.

#### **NON-OILY LIQUIDS:**

Oil spill cleanup operations produce large amounts of liquid sewage wastes that originate from domestic sources such as toilets, laundry and shower facilities, cooking, and gathering centers. The volume of such wastes is directly proportional to the number of cleanup workers involved.

Domestic wastewater may be collected and transported to a municipal sewage treatment system for disposal after approval from the municipal government. If the volume of sewage generated by cleanup workers exceeds the additional load handling capacity of the municipal sewage treatment plant, on-site land-based or barge-mounted wastewater treatment plants can be used to treat surplus waste volumes.

If additional wastewater treatment facilities (either land-based or barge-mounted) are to be used, the volume and concentration must be estimated for proper sizing of treatment systems. The RP should consult with the EPA and the ADEC for guidelines and standards for accomplishing this.

The sewage collected from remote areas may originate from non-flushing portable toilets that produce a concentrated waste stream high in BOD, suspended solids, and deodorant chemicals. Domestic wastewater treatment alternatives to municipal treatment facilities include:

- Physical-chemical package plants
- Extended aeration package plants
- Rotating biological contactor package plants

Packaged domestic wastewater treatment plants are recommended because they are portable and can be mobilized quickly, if available. These treatment facilities require plan review, an ADEC wastewater permit, and an EPA NPDES permit. A vessel with a USCG- approved Type II Marine Sanitation Device (MSD) does not need an ADEC or EPA permit for discharges. (All vessels built after January 1980 are required to have a Type II or Type III MSD).

#### 2. Short Term Management and Disposal Options for Solid Wastes:

If a spill occurs, oily and non-oily solid wastes will be collected, segregated, and stored at interim temporary storage areas and, if necessary, at the sites of cleanup operations on beaches. Most solid wastes will be stored in plastic bags after collection. Hazardous wastes will be handled in accordance with RCRA regulations and transported to the continental U.S. for disposal. Non-hazardous wastes will be handled in the most economic manner. Solid waste will be incinerated, if capacity allows; a secondary option is transport to landfills in Alaska or the continental U.S.

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#### **HAZARDOUS OILY SOLID WASTES:**

RCRA hazardous solid wastes may be generated from oil spill response activities. Potential sources of RCRA hazardous wastes are:

- Spill-related materials that exhibit hazardous characteristics
- Maintenance wastes generated by vessels and vehicles used in response and clean up.
- Laboratory wastes and residues from testing and disposal of spill-related material.

A hazardous waste storage area will be established if hazardous wastes are generated. If necessary, satellite accumulation areas will also be established. Proper container storage and labeling practices will be followed. Assigned personnel will monitor operations throughout the spill area to prevent improper waste disposal and to minimize the creation of hazardous waste through "mixing" (the disposal of small quantities of hazardous waste into solid waste containers, such as used oil tanks or boat washing slop tanks).

Hazardous waste management procedures include the following: ascertaining that response contractors are aware of regulatory requirements, including handling practices; obtaining generator I.D. numbers; proper labeling; storage; and monitoring of operational areas by personnel trained in hazardous waste management.

Hazardous wastes will be disposed of in a permitted hazardous waste facility in the continental U.S. since no permitted waste disposal site exists in Alaska at this time.

## **NON-HAZARDOUS OILY SOLID WASTES:**

**Incineration:** Waste incineration can be an economical means of destroying organic compounds. Ash generated as a result of incineration will be tested for hazardous characteristics and properly transported for disposal at appropriately permitted facilities.

With approval from the North Slope Borough, up to 15 tons per day of non-hazardous oily solid waste, except sand and gravel, may be shipped to the North Slope Borough incinerator facility at Deadhorse.

Several other state-approved facilities for incineration of response waste exist in Alaska. Use of these facilities for incineration of response wastes requires written approval from ADEC. Consult with the local ADEC Office on the status of approved landfills and incineration facilities.

**Disposal at Facilities in the Continental U.S.:** Some solid waste is not suitable for incineration (e.g., rain suits and some kinds of boom). These wastes will be shipped to landfill disposal sites in the continental U.S.

**Burial:** On-site burial may be used at remote locations where oily debris will otherwise have to be transported large distances for centralized disposal. The operation will consist of excavating an on-site disposal pit and burying the oily waste. The advantages of this disposal method are reduced costs for transporting, packaging, storage, and ultimate disposal fees.

Disadvantages of this method include the logistics of transporting excavation equipment and personnel to remote sites and possible future leakage from the uncontained disposal pits.

On-site burial of oily waste requires a solid waste disposal permit from ADEC. Although on-site burial may be permitted in remote locations, the likelihood of it occurring without engineering controls is minimal. On-site burial is not a preferred waste management option because of the technical difficulties involved and public and agency concerns over such disposal.

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**Waste Sludge Disposal:** The sludge resulting from certain treatment facilities will require further treatment or disposal. Sludge treatment may include:

- Fluidized bed incineration
- Steam stripping
- Digestion, dewatering, vacuum filtration, centrifugation
- Controlled land disposal

The quantity of sludge generated by the treatment process will depend on the solid content of the oily wastewaters treated. Steam-stripping can recover oil adhering to the solids and the process can produce a sludge possibly suitable for disposal at a permitted facility.

Depending on the organic content of the sludge, aerobic or anaerobic sludge digestion may be feasible. Heating the contents of the sludge digester will accelerate the rate of biological decomposition of the sludge and reduce the residence time required for sludge stabilization. The water resulting from the sludge dewatering operation may be returned to the wastewater treatment system ahead of the biological oxidation process. The stabilized sludge may be suitable for land disposal at a permitted landfill site.

**Non-Hazardous, Non-Oily Solid Wastes:** Non-oily solid wastes (refuse) are generated from a variety of sources during oil spill cleanup operations. Care must be taken to separate non-oily solids wastes from oily wastes and to maintain separation until ultimate disposal.

Separate trucks for onshore operations should be maintained for the transportation of non-oily solid wastes. The non-oily waste material may be sent to an appropriate municipal landfill or municipal incinerator with capacity to handle the wastes for disposal, if approved by local officials. Since most towns and cities have municipal landfills, disposal will likely occur at local population centers. The RP should coordinate with municipal officials.

The refuse produced by a large-scale oil spill cleanup operation may have a significant impact on the local landfill. For example, the Exxon Valdez oil spill cleanup operations in Prince William Sound increased local refuse disposal as much as 500%, with a corresponding increase in personnel and equipment at the local landfill operations to meet the higher demand. In such situations, it is important to coordinate with the community to assure that personnel and equipment requirements are met.

Disposal of wastes in solid waste sites must conform to the facilities' permit requirements.

## 3. Long-Term Management and Disposal Options:

**Open Burning:** On-site burning is a potential disposal method for non-hazardous oil-stained rock and sand mixtures, tar balls, logs, driftwood, and miscellaneous solid wastes.

**Remote Stockpile Burning:** Open burning may be a feasible method for large quantities of combustible oily wastes that are stockpiled in remote areas, but this method generally requires weather suited for smoke dispersal. Burn residue produced from open burning needs to be collected, tested for hazardous characteristics, and properly transported to disposal sites. Open burn pits designed to facilitate efficient removal of residues can facilitate a smoother cleanup operation.

Open burning in Alaska is regulated by ADEC, and before proceeding with an open burning operation, written approval must be obtained from ADEC. Approval is contingent upon submission of an open burning plan that addresses concerns outlined in the Alaska Air Quality Control Regulations (18 AAC 50). These

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concerns include the following: air contaminants, location of sensitive population centers, weather considerations, visibility impacts, overall coordination, public information, and other project specifications. In addition, the plan for open burning must include an evaluation of feasible alternatives with a demonstration that open burning is the most feasible choice.

*In Situ* Open Burning: Combustible materials, such as oiled logs, branches, and other natural materials found along beaches, can be burned in piles where they have been collected. A propane torch can be used to initiate combustion or a burn promoter, such as fuels, can be added to the oiled materials.

Open burning can also be applied to any oily wastewater collected for off-site disposal. However, this disposal method would require a site-specific ADEC Open Burning Permit and an ADEC Wastewater Disposal Permit. Burn residue will have to be contained and collected at each site and tested for hazardous characteristics, thus leading to possible logistical problems.

Sustained burns of logs and other large items can penetrate some substrates to a depth of about one foot, thus removing the underlying oil. Oil that has migrated downward into beach materials beyond that depth likely would not be burned.

Other disadvantages or constraints to *in situ* open burning can include:

- Public concerns.
- Threat of spreading (e.g., grass or forest fire)
- Burn residue might be hazardous or otherwise present a pollution problem
- Direct biological impacts from heat may be a concern where an extensive area is fired.
- Smoke plume may not meet regulatory requirements.

**Incineration:** Incineration can be used to dispose of oily waste materials at the source or at temporary collection and storage areas. The incineration process must be combined with appropriate flue gas cleaning and residue handling in order to complete the overall waste management process. A variety of wet, semi-dry, and dry acid-gas scrubbing processes are available with extensive, successful experience in application to incineration systems. The applicability of a specific process is determined through evaluation of flue gas characteristics, reagent and residue handling costs, need for plume suppression, and other factors. Sensitive instrumentation for detecting pollutant levels within the system is also vital, as is the ability of the equipment to adjust to changing conditions. Two technologies currently dominate the waste incineration industry: rotary kiln incineration and fluidized bed incineration. The advantages and disadvantages of both systems are well known and documented since both technologies are established incineration techniques with several commercial plants currently in existence.

Rotary kiln incineration appears to be the better overall option for necessary permanent incineration capacity. If on-going operations justify use of a permanent incineration system, the following system appears preferable:

- One or more medium-sized, modularized rotary kiln systems on the same site with good access by water and land.
- Necessary feed storage, feed preparation, ash-handling facilities, and other support services as needed for all units, making these common to all incineration units to the extent possible and practical.
- Operation of one unit at a time on locally generated wastes at reduced capacity to maintain the facilities in ready condition and to maintain the skills of the operating crew.

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Delivery of spill wastes and containerized materials to the site by barge for processing. Storage of the wastes most amenable to storage will stretch the processing period and reduce the size, number, and cost of the facilities.

This rotary kiln incineration system can be developed and implemented in a reasonably short time and in compliance with regulatory requirements. Some oil spill cleanup specialists have indicated that there are portable incinerators on the market that provide good backup in an emergency because they can be quickly dispatched to remote sites.

#### **Bioremediation:**

- **a.** *In Situ* **Biodegradation:** Bioremediation involves adding nutrients (nitrogen and phosphorus) to enhance indigenous microbial activity. Successful bioremediation can accelerate the cleanup of a spill and reduce the amount of oily wastes requiring disposal.
  - Bioremediation of *in situ* spilled oil is still in the research phase, but holds promise for use under favorable conditions on oiled sand, pebbles, cobble, driftwood, and other natural beach materials. The shoreline configuration must be amenable to this method, but smaller debris does not have to be transported to a remote site for ultimate disposal. Larger items of debris must be dealt with separately and the technique might require several seasons for significant degradation to occur.
- b. Landfarming: Some oil spill specialists in other parts of the country consider landfarming a feasible alternative to oily waste disposal. In Alaska, however, due to the low temperatures, short summers, high precipitation, and the scarcity of flat soily areas, further research must be done before the plausibility of this method can be determined. In landfarming, oily sludges are spread on a selected site and then combined with soil, moisture, and nutrients in the presence of oxygen to promote bacterial degradation of the hydrocarbon components. This requires an even application of flowing oily wastes. Smaller items, such as sand, pebbles, short seaweed (less than 6 inches long), sludges, and contaminated soils can also be processed this way. The most suitable sites are large fields with deep, tillable soil and a constant supply of water. Some sites might require the placement of a liner. The soil is prepared, the nutrients and wastes are applied, and then the field is tilled periodically. The soil pH must be controlled and the field must not have a greater than 1% or 2% grade.

Necessary equipment includes backhoes, tractors, rototillers, disc harrow or plows, fencing, pumps, and sprinkler systems. This method requires a permit and monitoring. If a liner is used, it must be removed when the hydrocarbons reach approved levels.

**Landfilling:** Approximately five permitted landfills that can accept oily wastes are currently in use in Alaska. These landfills are associated with oil fields on the North Slope and are typically reserved exclusively for the company operating the landfill.

At this time, no landfill facility in Alaska will accept significant amounts of oily solid wastes. In the event of a large spill, landfill disposal will be feasible only if ADEC permits disposal of significant amounts of oily waste at existing sites and/or expedites permitting of proposed sites. The advantages of having an in-state oily waste landfill include immediate availability and accessibility, as well as reduced logistical requirements for transportation, packaging and disposal.

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WASTE DISPOSAL OPTIONS				
WASTE STREAM	PRIMARY OPTION	FIRST	SECOND	
WASTE STREAM	PRIIVIARY OPTION	ALTERNATIVE	ALTERNATIVE	
Fresh Oil (101)	Refining	Fuel Blending	In Situ Burning	
Weathered Oil (102)	Fuel Blanding	Land	Solidify & Landfill	
weathered Oil (102)	Fuel Blending	Treatment	Solidity & Latiuilli	
Emulsions (102)	Fuel Blanding	Land	Solidify & Landfill	
Emulsions (103)	Fuel Blending	Treatment	Solidify & Landfill	
Hydraulic Fluids (104)	Refining			
Oil Debris (105)	Incineration	Open Burning	Landfill	
Oily PPE (106)	Incineration	Landfill		
Oily Sand/Craval (107)	In City Durning	Land	Landfill	
Oily Sand/Gravel (107)	In-Situ Burning	Treatment	Lanumi	
Oily Sorbents (108)	Fuel Blending	Incineration	Landfill	
Oily Wastewater (109)	Electrocoagulation Treatment			
Animal Carcasses (110)	Offer for Research	Incineration		
Domestic Wastes (201)	Incineration	Landfill		
Non-Oily Debris (202)	Incineration	Landfill		
Pallets (203)	Recycle/Reuse	Open Burn	Landfill	
Paperboard (204)	Recycle/Reuse	Open Burn	Landfill	
Drums (206)	Recycle/Reuse	Landfill		
Hazardous Waters	Special Handling, Storage,			
(301)	Treatment			

# WASTE DISPOSAL CONTRACTORS

Listed are some contractors who can provide disposal or waste management services. These are not the only available contractors, but represent the variety of services available.

Facility Name	Contact Information	Comments				
Recovered Products (gas, diesel, etc.)						
Alaska Pollution Control	907-344-5036 10620 Old Seward Highway Anchorage, AK 96515	Processes oily water, motor oils and recovered fuels				
Alaska Soil Recycling	907-349-3333 1040 O'Malley Road Anchorage, AK 96515	Soil burning facility				
Basin Oil Company	800-439-2948 8661 Dallas Ave A Seattle, WA 98108	Non-Haz used oils blended for ship bunkers				
Petroleum Reclaiming Services	206-587-6206 3003 Taylor Way Tacoma, WA 98421	Waste oil processor, also takes oily water				
Philip Environmental	800-228-7872 1011 Western Ave, Ste 700 Seattle, WA 98104	Full service haz-waste disposal contractor				

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Chemical Waste Management	800-962-4987 17629 Cedar Springs Arlington, OR 97812	Full service has contractor. Landfills located in Oregon and California.
Clean Soils	907-258-7645 2301 Spar Avenue Anchorage, AK 99501	Soil burning facilities in Anchorage and Kenai. Mobile facility also available
Foss Environmental	206-281-3823 7440 W Marginal Way S Seattle, WA 98108	Full service contractor.
Contaminated Soil		
Philip Environmental	800-228-7872 1011 Western Ave, Ste 700 Seattle, WA 98104	Full service haz-waste disposal contractor
Chemical Waste Management	800-962-4987 17629 Cedar Springs Arlington, OR 97812	Full service has contractor. Landfills located in Oregon and California.
Oily Contaminated Equipment/Ma	terials & PPE	
DOH Environmental	800-478-1917 10012 Jensine Juneau, AK 99803	Spill cleanup contractor. Can manage waste through appropriate contractors.
Channel Sanitation Services	907-780-4288 5600 Tonsgard Court Juneau, AK 99801	Non-hazardous disposal only
Chemical Waste Management	800-962-4987 17629 Cedar Springs Arlington, OR 97812	Approved landfills.
Decontamination Solutions	-	
Philip Environmental	800-228-7872 1011 Western Ave, Ste 700 Seattle, WA 98104	Full service haz-waste disposal contractor
Chemical Waste Management	800-962-4987 17629 Cedar Springs Arlington, OR 97812	Approved landfills.
Oily Sorbents		
Channel Sanitation Services	907-780-4288 5600 Tonsgard Court Juneau, AK 99801	Incineration of non-hazardous oily materials.
Basin Oil Company	800-439-2948 8661 Dallas Ave A Seattle, WA 98108	Delivers non-hazardous sorbents to facility for energy recovery.
Spent Chemicals		
Philip Environmental	800-228-7872 1011 Western Ave, Ste 700 Seattle, WA 98104	Full service.
Chemical Waste Management	800-962-4987 17629 Cedar Springs Arlington, OR 97812	Full service.

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# 3240.2 - Decanting Policy

With State approval, on-site decanting may be allowed. The form for gaining SOSC approval for decanting is linked on ADEC's website under Waste Management permits:

http://dec.alaska.gov/spar/ppr/response-resources/permits-tool/#nogo

# 3240.3 – Sample Waste Management Plan

Standing <u>waste management permits</u> may be found in the "Planning" section of this document. The <u>ADEC's STAR Manual</u> provides a checklist for waste management.

## 3250 - Decontamination

The Alaska Department of Environmental Conservation (ADEC) <u>Spill Tactics for Alaska Responders (STAR)</u> <u>Manual</u> provides guidance for vessel decontamination and other tactics related to spill response.

3250.1 - Sample Decontamination Plan - TBD

## <u>3260 – Alternative Response Technologies</u>

Decisions regarding the use of *in situ* burning and/or dispersants or any other chemical response tactic in PWS Area will be made according to the guidelines presented in **the RCP**. Pre-approval for use of these tactics may exist for certain conditions and locations.

FOSCs in Alaska may authorize the use of dispersants during incident response in areas where dispersant use and *in situ* burning are not pre-approved. This authorization requires concurrence of the EPA and the ADEC Alaska Regional Response Team (ARRT) representatives and consultation, when practicable, with the DOC and the DOI ARRT representatives. In addition, any dispersants used must be listed on the National Contingency Plan Product Schedule. *Always consult* the appropriate guidelines for dispersants and *in situ* burning before proceeding.

Dispersant guidelines for PWS delineate areas where dispersants have been pre-approved by appropriate entities and contain checklists used by FOSCs in making decisions to use dispersants during incident response. *In situ* burning guidelines developed for Alaska include the parameters for pre-approval of *in situ* burning in the marine environment and contain a checklist used by FOSCs in making decisions to use *in situ* burning during incident response.

According to the guidelines and from an operational perspective, both of these non-mechanical response options are usually considered at an early stage in a spill response operation. Both of these tactics, dispersants and *in situ* burning, are most effective when applied to oil that has not been heavily emulsified. Therefore, the operational window for considering these tactics is somewhat restricted by time. If either or both of these options are to be considered, the Unified Command should direct an early and immediate assessment of the feasibility for employing these non-mechanical options and make a timely decision to approve/disapprove the use of these tactics.

While there are no legal obligations for the FOSC and SOSC to include local officials from PWS Area in the decision-making process regarding local use of dispersants and/or *in situ* burning, this is an issue of primary concern to local residents. To the extent practicable, the appropriate communities should be involved in the decision-making process.

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3260.1- Dispersants - TBD

3260.2 - ISB - TBD

3260.3 - Bioremediation - TBD

3260.4 – Surface Washing Agents - TBD

3260.5 - Alternative Response Technology References - TBD

#### 3300 - EMERGENCY RESPONSE

# 3310 – Search and Rescue (SAR) –TBD 3310.1 – SAR Area Resources – TBD

# 3320 - Salvage/Source Control

Reference Section 8300 of this document.

## 3330 - Marine Fire Fighting

Reference Section 8100 – Marine Fire Fighting for guidance.

## 3340 - HAZMAT

Reference Section 7000 – Hazardous/Radiological Substances for guidance on hazmat response.

## 3350 – Emergency Medical Services (EMS)

Check individual towns and villages in the <u>Community Profiles</u> to see what medical facilities may be available. For oil or chemically contaminated victims, check immediately with the hospital for any predecontamination requirements

#### 3360 – Law Enforcement

Reference Community Profiles for town and village law enforcement information.

## <u>3370 – Disaster/Emergency Declarations</u>

A natural disaster may cause an oil or hazardous substance discharge. When a State disaster emergency declaration and/or a federal major disaster or emergency declaration has been issued, additional procedures are necessary to coordinate the spill response effort with the overall disaster/emergency response effort. These procedures are also used in cases where the spill itself is determined to be a disaster under State law and/or results in a federal emergency declaration.

State operations are affected when the governor finds that a disaster has occurred or that a disaster is imminent or threatened and, by proclamation, declares a condition of disaster emergency. In such cases, the State's spill response organization will fall under the State Emergency Coordination Center, Operations Section. The Incident Commander of the disaster response is the State Area Commander appointed by the Governor. As such, the State Area Commander would set priorities to make the best use of available resources. Within these constraints, the SOSC would command the spill component of the disaster response to effect containment and cleanup.

The State of Alaska Memorandum of Agreement (MOA) between the Department of Environmental Conservation, Division of Spill Prevention and Response (DEC/SPAR) and the Department of Military and Veteran's Affairs, Division of Homeland Security and Emergency Management (DMVA/DHSEM), effective January 8, 1992, explains how a spill response will be managed by the State during a declared disaster. Under the MOA, the Commissioners of the DEC and the DMVA will coordinate to determine that a release

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constitutes a disaster emergency under AS 26.23 and may request the Governor to declare a disaster emergency. (Reference the Alaska Regional Contingency Plan).

The National Response Framework (NRF) establishes the basis for the provision of federal assistance to a State and its affected local governments impacted by a catastrophic or significant disaster or emergency that results in a requirement for federal assistance. The NRF is based on the fundamental assumption that a significant disaster or emergency will overwhelm the capability of State and local governments to carry out the emergency operations necessary to save lives and protect property. Consequently, resources of federal departments and agencies are used to provide federal response assistance to the State. The NRF uses a functional approach to group the types of federal assistance that a State is most likely to need into fifteen Emergency Support Functions. Responses to oil spills or hazardous substance releases resulting from natural disasters are provided through Emergency Support Function (ESF) #10, Oil and Hazardous Materials Response.

Under the NRF, the President appoints a Principal Federal Official as the President's representative to coordinate the overall delivery of federal assistance. Federal departments and agencies will provide response assistance directly to the State, under the overall direction of the Principal Federal Official and based on priorities identified by the State Coordinating Officer (SCO).

A figure below shows the location of ESF #10 within the entire State/Federal response structure. The organizational framework for responding to oil spills and hazardous substance releases within ESF #10 stays the same for spills or releases that occur in the absence of a natural disaster. However, during a State-declared disaster emergency, OSCs report to the SCO. During a federal major disaster or emergency declaration, the SOSC ultimately reports to the SCO, and the FOSC ultimately reports to the Principal Federal Official. When either a State or federal disaster results in conflicting demands for scarce resources (e.g., aircraft) the SCO is responsible for making resource allocation decisions.

In some cases when a federal major disaster or emergency declaration has been issued, response costs incurred by local and State agencies may be eligible for reimbursement under Public Law 93-288. In such cases, agencies must meet additional accounting requirements established by the Federal Emergency Management Agency (FEMA). The SCO will provide guidance on these requirements.

Generally, the Governor's proclamation of a disaster emergency is a prerequisite to a federal major disaster or emergency declaration. However, the President may determine that an emergency exists for which the primary responsibility for response rests with the United States.

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FIGURE 3-1: SPILLS RESULTING FROM NATURAL DISASTERS THAT DO NOT HAVE A PRESIDENTIAL DECLARATION

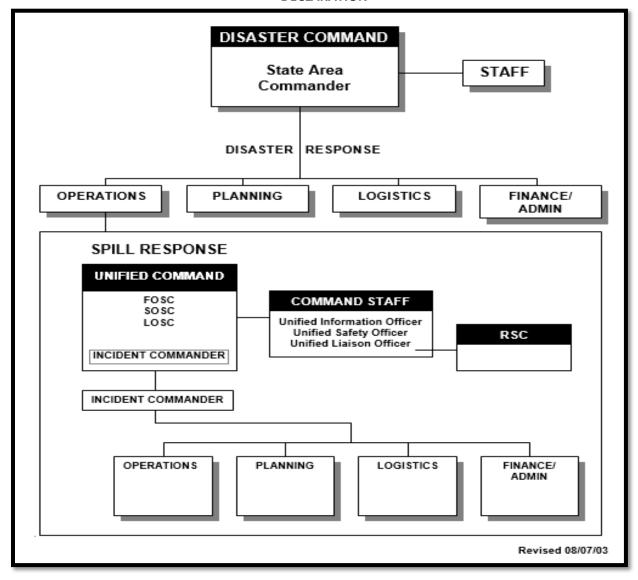
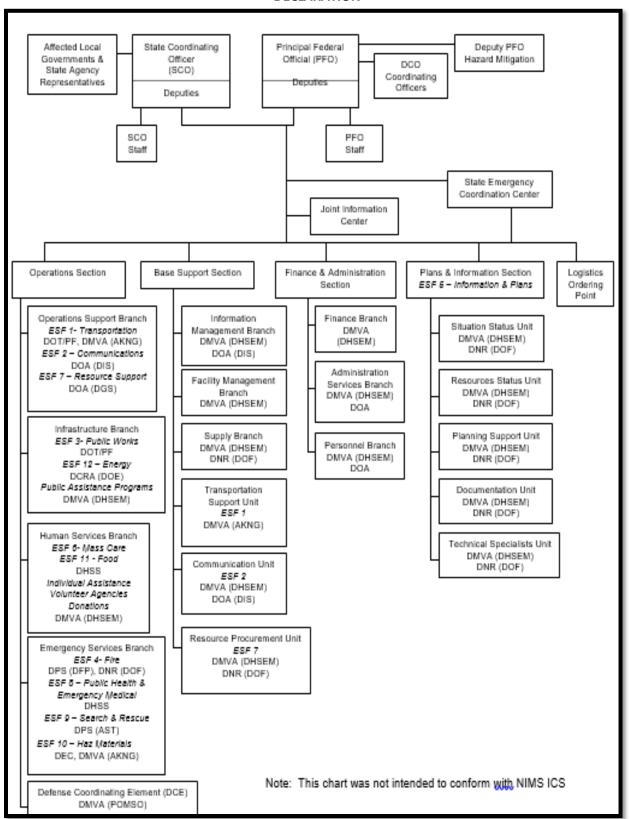


FIGURE 3-2: SPILLS RESULTING FROM NATURAL DISASTERS THAT HAVE A PRESIDENTIAL DISASTER

DECLARATION



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#### 3400 – AIR OPERATIONS

#### 3410 - Air Tactical

3410.1 – Aerial Surveillance- TBD

# 3410.2 - Aerial Dispersant Application

Reference the Alaska Regional Contingency Plan for the Oil Dispersant Guidelines for Alaska. Additional technical assistance for dispersant application can be found in the <u>ADEC's STAR Manual</u>.

# 3410.3 – Procedures for Temporary Flight Restrictions

FAA can be requested to impose flight restrictions, and FAA controllers can be deployed and operate from a USCG WHEC or WMEC.

#### 3410.4 - Permanent Area Restrictions

FAA can be requested to impose flight restrictions, and FAA controllers can be deployed and operate from a USCG WHEC or WMEC.

### <u>3420 – Air Support</u>

# 3420.1 - Airports/Helibases

Consult with the Alaska Supplement to the NOAA Flight Information Publication, or the FAA on airport and runway specifics. In general, runways are paved in locations serviced by the major commercial airlines including Alaska, United, and Delta. Commuter airlines service the smaller communities, and charter flights aboard light aircraft and helicopters are available. During summer months when tourist traffic is heavy, charter flights may be limited. Weather may close the airports for days at a time. High winds and low visibility often ground small planes. Airplane crashes are common. For a major response, local air traffic will dramatically increase. FAA can be requested to impose flight restrictions, and FAA controllers can be deployed and operate from a USCG WHEC or WMEC.

For current runway status, refer to the latest edition of the AK Supplement to the NOAA flight information publication. Additional information may be available in *Part One- Community Profiles*.

Also refer to the following website for detailed information on airports in Alaska. In the "Quick Listing" Search pattern, select "Alaska" to access information on the 600 plus public and private airports in the State: <a href="http://www.gcr1.com/5010web/">http://www.gcr1.com/5010web/</a>

PUBLIC-USE AIRPORTS/LANDING STRIPS WITHIN PRINCE WILLIAM SOUND AREA					
LOCATION	RUNWAY LENGTH (FEET)	RUNWAY COMPOSITION; LIGHTING	EMERGENCY FUEL	REMARKS; AIRPORT MANAGER PHONE	
Chenega Bay	3,000	Gravel		Unattended; 262- 7562	
Chistochina	2,060	Turf-Gravel; Lights		Unattended; 822- 3222	
Chitina	2,850	Gravel		Unattended; 822- 3222	
Copper Center 2	2,200	Gravel		Unattended; 822- 3222	
Cordova (Muni)	1,800	Gravel		Unattended; 424-	

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PUBLIC-USE AIRPORTS/LANDING STRIPS WITHIN PRINCE WILLIAM SOUND AREA				
LOCATION	RUNWAY LENGTH (FEET)	RUNWAY COMPOSITION; LIGHTING	EMERGENCY FUEL	REMARKS; AIRPORT MANAGER PHONE
				3202
Cordova (Merle K Smith)	7,500	Asphalt; Lights		Attended; 424- 3202
Cordova (Strawberry Point)	1,600	Turf		Private airport; Unattended; 424- 7161
Gulkana	5,001	Asphalt; Lights	100LL	Attended; 822- 3222
Lake Louise (Evergreen Lodge)	5,000	Water (ice)		Private airport; attended; 822- 3250
May Creek	2,700	Turf-Gravel		Unattended; 822- 3222
McCarthy	3,500	Gravel		Unattended; 822- 3222
McCarthy (Jakes Bar)	1,000	Gravel		Unattended; 822- 7240
McCarthy (Swift Creek)	2,000	Turf		Private airport; unattended; 554- 4414
Middleton Island	3,158	Gravel-Dirt		Unattended; 283- 4526
Northway	5,100	Asphalt-Gravel; Lights	100LL B+, MoGas	Attended; 883- 5128
Paxson	1,900	Turf-Gravel		Private airport; unattended; 822- 3330
Tatitlek	3,701	Gravel; Lights		Unattended; 835- 5658
Tazlina	1,200	Gravel		Unattended; 822- 3222
Tazlina (Smoky Lake)	2,200	Water (ice)		Private airport; attended; 822- 3061
Tetlin	3,300	Gravel		Private airport; unattended; 883- 5128
Thompson Pass	2,530	Turf-Gravel		Unattended; 269- 8503
Tok 2	2,035	Gravel		Private airport; unattended
Tok Junction	2,509	Asphalt; Lights	100LL A	Unattended; 883-

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PUBLIC-USE AIRPORTS/LANDING STRIPS WITHIN PRINCE WILLIAM SOUND AREA					
LOCATION	RUNWAY LENGTH (FEET)	RUNWAY COMPOSITION; LIGHTING	EMERGENCY FUEL	REMARKS; AIRPORT MANAGER PHONE	
				5128	
Valdez (Pioneer Field)	6,500	Asphalt; Lights	100LL B	Attended; 835- 5658	
Whittier	1,480	Gravel		Unattended; 783- 2232	

3420.2 – Helospots-TBD

3420.3 – List of Certified Helicopter/Aircraft Providers

	AIRCRAFT COMPANIES AVAILABLE FOR TRANSPORTATION			
COMPANY	CONTACT	PHONE	LOCATION	AIRCRAFT /CAPABILITIES
Alaska Airlines	Reservations	800-252-	Anchorage	Daily service to Cordova
		7522		
ERA Aviation	Reservations	855-850-	Anchorage	Daily service to Cordova,
		7359	_	Valdez
AK Air National	Lt. Col.	249-1105	Anchorage	(8) C-130H; (4) C-130; (6) HH-
Guard	Graybeal	249-1131		60
AK Army National	Col. Stigar	428-6631	Anchorage	(2) UH-60L; (8) C-23; (1) C-12
Guard	Lt. Col. Kidrick	428-6325		
	Lt. Col. Williams	428-6310		
Dept. of Defense	ALCOM/3 <sup>rd</sup>	552-3000	(ALCOM)	C-130s, CH-47D, UH-60, UH-
	Wing Command		Elmendorf AFB	1P, C-12
	Post			
ERA Helicopters	Lash Larew	550-8600	Anchorage	ASTAR 350 B2, AGUSTA A
		659-2465	Deadhorse	119 (Koala), AGUSTA A 119
		550-8653	Kenai	MKII, AGUSTA A 109 POWER,
				EC145, EC 135 CPDS P2+,
				AgustaWestland AW 139,
				Sikorsky S76 A++, Sikorsky
				S76 C++, EC 225
Bristow Group	Tom Mays	452-1197	Fairbanks/Valdez	BO-105CBS-4, CEU206G
Alaska		835-4501	•	(Stationaire 6), HB-206B
				(Jetranger III), HB-206L-3
				(Longranger)
Cordova Air	Davis Erbey	424-3289	Cordova (Eyak	Cessna 206, Beaver, Scout,
Service			Lake)	Piper PA-12

3420.4 – Fuel/Maintenance Sources - TBD 3420.5 – Air Traffic Control Procedures - TBD

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#### 3500 - STAGING AREAS

# 3510 - Pre-Identified Staging Areas

Reference Community Profiles for pre-identified staging areas.

# 3520 - Security - TBD

# 3600 - WILDLIFE

# 3610 - Fish and Wildlife Points of Contact

Questions regarding oiled or potentially oiled wildlife preparedness and response activities should be directed to:

directed to:	
Contact	Phone
U.S. Department of the Interior-	271-5011
U.S. Department of Commerce-	271-5006
Alaska Department of Fish and Game	267-2342

# 3620 - Wildlife Rehabilitation

Reference the Wildlife Protection Guidelines for Alaska, compiled by the Alaska Regional Response Team, Wildlife Protection Committee at the following link: http://dec.alaska.gov/spar/PPR/plans/uc.htm

**3700 - RESERVED** 

3800 - RESERVED

3900 - RESERVED FOR AREA/DISTRICT

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#### 4000 - PLANNING

#### 4100 - PLANNING SECTION ORGANIZATION

Planning Section function and staff positions can be found in the National Incident Management System (NIMS) Guidance. The subsections below (4200-4600) provide a brief overview of the Units within the Planning Section. For more ICS position description information, reference the following:

- The USCG Incident Management Handbook
- The Alaska Incident Management System Guide, Appendix B AIMS Position Descriptions
- The Alaska Incident Management System Guide, Appendix D" IMT Meeting Guidelines

### 4110 - Planning Cycle

Several ICS forms are referenced below. Blank ICS forms and boilerplate documents are available on the USCG Homeport Website.

4200 - SITUATION - TBD

# 4210 - Chart/Map of Area

Reference the following:

- ADEC Geographic Information Systems Maps
- NOAA's Arctic ERMA

# 4220 - Weather/Tides/Currents

The National Weather Service (NWS), which is part of the National Oceanic and Atmospheric Administration (NOAA), can provide current and forecast weather for the marine environment. Reference below for contact information and website links to access real time weather, tides, currents and ice information.

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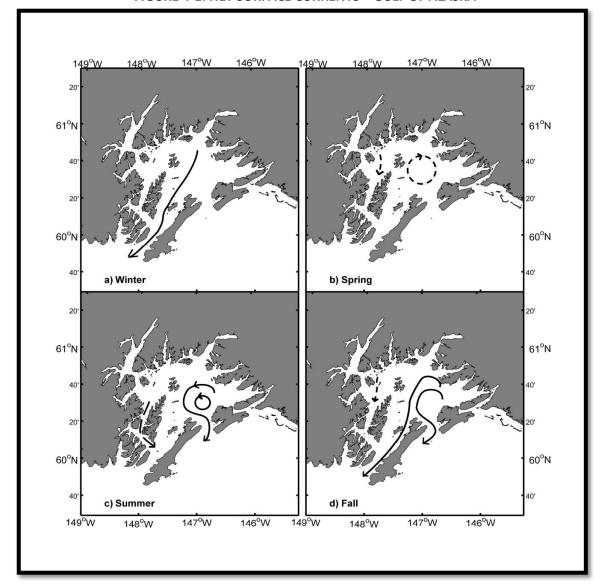
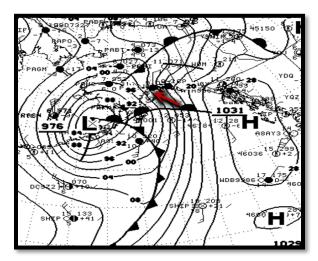


FIGURE 4-1: NET SURFACE CURRENTS - GULF OF ALASKA

The arrows indicate flow direction or circulation paths by season: (a) Winter; (b) Spring; (c) Summer; and (d) Fall. The dashed lines indicate weak flow. Wind forcing can disrupt the circulation and, at times, even reverse it. But these diagrams provide a general reference for surface flows averaged over a season. Source: Musgrave, D.L., M.J. Halverson, and W.S. Pegau, Seasonal Surface Circulation, Temperature, and Salinity in Prince William Sound, Alaska, *Cont. Shelf Res.*, **53**, 20-29, 2013

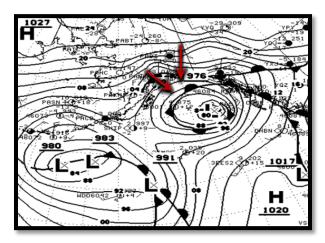
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#### FIGURE 4-3: PWS SEASONAL WINDS



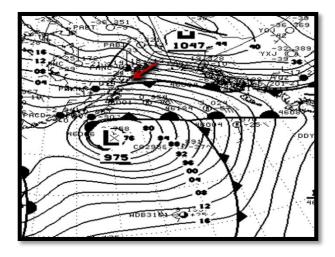
# Southeast Wind (Fall)

Southeast Wind is most common for PWS anytime of the year. The most common time for strong SE wind is late August through mid-October. Above is the typical surface analysis associated with strong SE wind in PWS.



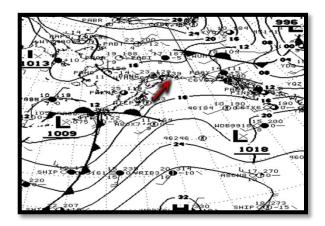
### North and Northwest Wind (Winter)

North and Northwest wind are most common in PWS during the late winter to early spring. Above is the typical surface analysis associated with this scenario. These winds are highly channeled and gusty. Typically these winds are also accompanied by super structure icing for vessels.



# **Northeast Wind (Winter)**

Northeast winds are most common in the winter, but are not exclusive to that season. Northeast winds tend to be more localized than southeast winds and the strongest winds often are not observed in the main part of the sound. Above is the typical Surface Analysis for NE wind in PWS.



#### Southwest and light winds (Summer)

Southwest winds are most common in the summer months in Prince William Sound, and are rare in the winter. The above Surface Analysis is typical for a light wind or SW wind regime for PWS.

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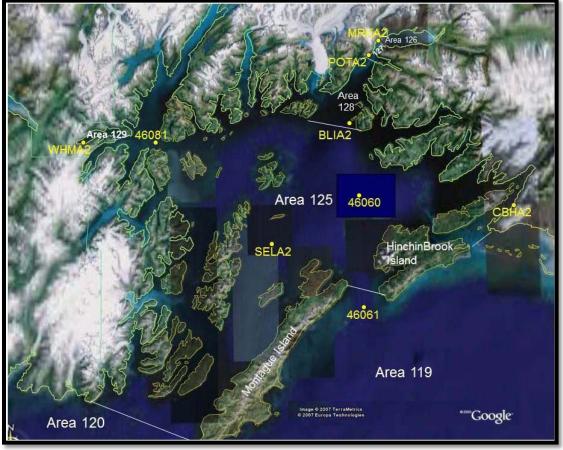


FIGURE 4-4: WEATHER STATIONS

There are significant challenges for forecasting weather regimes in PWS. Even from weather system to weather system, though they look similar, there can be large differences in what is reported at any one station compared to another in any particular part of PWS. One of the reasons for this is that while the east-west distance of PWS that opens into the Gulf of AK (including islands) is only about 100 miles, the number of islands and fjords increase the actual coastline length to over 3,750 miles. BLIA2, POTA2 & MRKA2 stations are all in Port Valdez, Valdez Narrows and Valdez Arm and the southwest portion of PWS does not have any weather observation stations. PWS is characterized with two distinctly different orientations: (1) eastern PWS, dominated by east northeast to west to southwest oriented bays and channels; and (2) western PWS, dominated by north northeast to south southwest-oriented bays and channels. The major geographical features surrounding PWS also play a role in defining its weather patterns. The Chugach Mountains border PWS on the east, west, and north, while Montague & Hinchinbrook Islands buffer winds, weather, and waves from the Gulf of AK to the south. As a result, PWS has generally less severe weather than the adjacent North Gulf Coast waters, especially in the summer, for example, when it can go many days on end with light winds and low seas. Source: NOAA

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# <u>4230 – Situation Unit Displays - TBD</u>

# 4240 - On-Scene Command and Control (OSC2)

Per the USCG Incident Management Handbook, "[t]he Incident Commander (IC), whether acting as a single IC or as part of a Unified Command (UC), is responsible for providing direction and guidance to the Incident Management Team (IMT). The IC/UC analyzes the overall requirements of the incident and determines the most appropriate direction for the IMT to follow during the response. This is accomplished by identifying incident functions, setting priorities, identifying limitations and constraints, developing response objectives, identifying Critical Information Requirements and their time criticality, making key decisions, determining IMT operating procedures, assigning work (tasks) to primary staff within the IMT, and assessing progress."

### 4250 - Required Operational Reports

Incidents resulting in the activation of an IMT require detailed information transfer. Reference Section 4800 for additional required Correspondence, Permits, Consultation and Reports that might be necessary during or after an incident.

# 4250.1 – Form 209- Incident Status Summary

Access the ICS Form 209 at the USCG Homeport Website.

### 4250.2 - Pollution Reports (POLREPs)

POLREPs are prepared for pollution events of significance/potential significance and whenever the Oil Spill Liability Trust Fund has been opened. Reports are sent from the FOSC to the USCG Seventeenth District, EPA, and ADEC to provide an overview on spill response efforts. A POLREP template can be found on the CG Portal.

# 4250.3 – Situation Reports (SITREPS)

ADEC disseminates information on ongoing emergency spill response activities through the issuance of periodic Situation Reports (SITREPs). The number and frequency of these reports, which follow a standard format, depends upon the severity of the incident and the size and scope of ADEC response activities associated with the incident. ADEC SITREPs are routinely distributed to ADEC management, the Governor's Office, and other State agencies, as well as to all appropriate stakeholders depending on the specific incident. Additional SITREPs are generated during the cleanup and recovery phase to keep interested parties informed on the progress of this aspect of the response. These SITREPS can be found on ADEC's website.

### 4250.4 – After Action Report

In order to better evaluate the response methods used by ADEC and ensure that any problems encountered are adequately addressed, an "after action" summary report (i.e., a lessons learned report) is produced for each significant spill incident involving ADEC and other State response staff. After Action Reports are prepared through consolidating ADEC internal inputs as well as inputs from other responding State agencies.

#### 4250.5 – Federal On-Scene Coordinator's Report

The FOSC will submit an FOSC report as determined necessary by the ARRT for a particular incident.

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#### 4300 - RESOURCES

Per the USCG Incident Management Handbook, "[t]he Resource Unit Leader (RESL) is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, and using a status system that indicates the current location and status of all these resources."

# <u>4310 – Resource Management Procedures</u>

4310.1 – Check-in Procedures

Per the USCG Incident Management Handbook, "[c]heck-in/Status Recorders (SCKNs) work for the RESL to check-in incident personnel at check-in locations and ensure that all resources assigned to an incident are accounted for. Check-in is the process whereby resources first report to incident response. Check-in locations include: Incident Command Post (Resources Unit), Incident Base, Camps, Staging Areas, Helibases, Helispots, or Division/Group Supervisors (for direct tactical assignments)."

#### 4320 - Volunteers

The use of volunteers has been an item of increasing interest following several incidents of note in the United States.

The possible use of volunteers is recognized in 40 CFR 300 (the National Oil and Hazardous Substances Pollution Contingency Plan [NCP]), part 185 (c) as follows: Area Contingency Plans (ACPs) shall establish procedures to allow for well-organized, worthwhile, and safe use of volunteers, including compliance with 300.150 regarding worker health and safety. ACPs should provide for the direction of volunteers by the on-scene coordinator, remedial project manager, or by other federal, state, or local officials knowledgeable in contingency operations and capable of providing leadership. ACPs also should identify specific areas in which volunteers can be used, such as beach surveillance, logistical support, or bird and wildlife treatment. The definitions section of the NCP includes "volunteer" as follows: **Volunteer** means any individual accepted to perform services by the lead agency that has authority to accept volunteer services (examples: Reference 16 U.S.C. 742f(c)). A volunteer is subject to the provisions of the authorizing statute and the NCP.

Within the State of Alaska, the Alaska Department of Environmental Conservation (ADEC) does not embrace the concept of the use of volunteers for oil and hazardous substance response for a number of reasons, including insurance and liability issues and general accountability (the need for a dedicated work force to meet specified performance standards, availability to work as scheduled, and not as time permits, etc.).

In the case of a major spill event, the ADEC will direct the responsible party (RP) to train and hire an additional work force (volunteers may be considered, but will be hired only as paid employees) as necessary. If no RP exists (or the RP refuses to hire needed additional workers), then the ADEC will use its term contractors and proceed with emergency hiring of additional workers, as necessary. The agency will bill the RP and cost recover for any and all costs involved in the response, including the agency's costs to bring on additional workers (e.g., paid employees, not volunteers).

http://www.oilspilltaskforce.org/docs/planning for volunteer management.pdf

Local volunteers can play an important role in oil spill response, and this is especially true in the Arctic and Western Alaska Area, where there is a wealth of local knowledge pertaining to wildlife populations,

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currents, tides and other environmental phenomena. During a spill emergency, it is likely that large numbers of local community members will arrive on scene, eager to participate in response activities.

A volunteer coordination plan is necessary to effectively manage and direct volunteer activities such as recruitment, training, communications and referral. This plan addresses such issues for all "unaffiliated" volunteers, or volunteers who are not already affiliated with a response organization. Affiliated volunteers should work through their respective agencies.

This plan has been modeled after the Volunteer Action Plan developed for Kenai Peninsula Borough with funding from Arco Marine, Inc. This plan is designed to deal only with volunteer coordination activities during an actual spill response.

**Organization and Activation:** A Volunteer Manager may be appointed by the Incident Commander to manage all aspects of the volunteer program, including communications, recruitment, training and referral. The Volunteer Manager will report directly to the Logistics Section Chief.

The Volunteer Manager will operate a Volunteer Referral Center (VRC), which will refer volunteers to appropriate ICS units or activities where they can apply their skills and interests. The VRC will provide initial screening, skill and training identification, and orientation. Additional screening, training and supervision will be provided by the ICS unit to which the volunteer is referred.

The facility selected to serve as the VRC may be co-located with the Command Center, or may be located nearby in a school, church, recreation center, community building, or other such facility. The facility should provide easy public access, enough room for reception and training areas, and some communication capabilities. The VRC should have basic office equipment, such as computers, telephones, fax machines, copiers, and office supplies.

**Insurance and Liability:** There are currently no state or borough provision for insurance/liability/worker's compensation coverage for volunteers in an emergency response. In most cases, volunteers will be working for the Responsible Party (RP) or lead agency in charge of spill response. The VRC will act only as a referral agency and will not directly supervise the volunteers, with the exception of those volunteers working in the VRC. Effective screening, training, and supervision will help to limit liability when assigning volunteers.

**Training, Screening and Skill Identification:** As potential volunteers contact the referral center, they will be screened and referred to ICS units based on their skills, training and certification, and availability. During response and recovery activities, response agencies or the RP may contact the Volunteer Referral Center and submit requests for volunteers.

Training, screening and skill identification will be accomplished by using the following:

- A training module that covers basic orientation to the AWA Contingency Plan, ICS organizations and functions (both general section divisions and specific unit tasks), and basic safety and communications procedures.
- A database that identifies volunteers' completed training, additional skills and certifications (HAZWOPER, wildlife hazing, etc.), and individual preferences and availability.

**General Guidelines on the Use of Volunteers:** The National Response Team developed guidelines for the use of volunteers in support on an oil or hazardous substance response:

- Use of Volunteers Guidelines For Oil Spills (2012)
- Use of Volunteers for Oil Spills Memorandum of Understanding

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The Pacific States/British Columbia Task Force for Oil Spills has developed a document entitled *Planning Guidelines for Convergent Volunteer Management*, which may be viewed at the following website: http://www.oilspilltaskforce.org/docs/planning for volunteer management.pdf

#### 4320.1 – Assistance Options

During response and recovery operations, the following process will be used to identify needs, recruit, and place volunteers:

- Designate Volunteer Manager and establish VRC as soon as Incident Command is mounted.
- Establish and publicize toll-free phone number.
- > Distribute volunteer request forms to ICS Section Chiefs (through Command Center).
- In cooperation with Public Information Officer, distribute volunteer information to local newspaper and radio.
- As volunteers contact the VRC, screen and refer them to agencies/organizations/ICS units based upon their skills, training and availability.

The Volunteer Request Form (below) should be copied and distributed to responders via the Command Center as early as possible. Responding agencies, contractors, organizations, or ICS unit leaders will use these forms to identify volunteer needs.

Convergent volunteers (volunteers arriving at the VRC or on-scene) will be directed to the VRC and asked to fill out a Volunteer Registration Form (below).

4320.2 - Assignment-TBD

#### 4320.3 – Coordination

**The Volunteer Manager** is responsible for the implementation and management of the Volunteer Coordination Plan. It is the Volunteer Manager's responsibility to recognize and anticipate the potential role of volunteers in a spill response, to coordinate needs and available resources, and to manage the VRC in recruitment, identification, training, and placement of volunteers during a response.

All volunteer referral center staff and volunteers will report to the Volunteer Manager, who reports to the Logistics Section Chief (Reference diagram below).

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**UNIFIED COMMAND** FOSC, SOSC, LOSC, RPOSC **INCIDENT** COMMANDER COMMAND **STAFF OPERATIONS PLANNING** LOGISTICS **FINANCE SECTION SECTION SECTION SECTION** VOLUNTEER MANAGER Volunteer Volunteer **Referral Center** Referral Center Volunteers Staff SERVICE **SUPPORT BRANCH BRANCH** 

FIGURE 4-5: VOLUNTEERS AND THE INCIDENT COMMAND SYSTEM

The Volunteer Manager's duties may include the following:

- Serve as a liaison with the IC and Unified Command via the Logistics Section Chief to coordinate volunteer needs.
- Serve as the principal contact for all volunteers and all units/agencies needing volunteers.
- Establish and manage the VRC to include registration, orientation, placement, recruitment, training, and referrals.
- Establish a communication system, including a toll-free phone number, fax lines and fax machines, phones, and a link to the Command Center.
- Coordinate with the Public Information Officer (or Joint Information Center) to provide notification to the media regarding types of volunteer jobs available and procedures for volunteering.
- Provide safety training as necessary for all volunteers to ensure they are properly trained and equipped and in compliance with federal, state and local safety regulations.
- Coordinate with response agencies and the Responsible Party to provide additional volunteers as needed and to coordinate referrals.
- Maintain record keeping of volunteers, training and certification, hours worked, and their assigned activities.
- Provide volunteer recognition.

#### **Volunteer Referral Center**

- **1. Facility**: the VRC should provide:
  - Easy public access
  - Room for training and orientation

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- > Basic communications capabilities and office equipment:
  - Telephones
  - 2-3 phone lines, one of which is toll free incoming only
  - Fax machine and 2 dedicated fax lines (ingoing & outgoing)
  - Communication link to Command Center
  - Access to news & information releases to media and local government in order to advertise volunteer needs and toll free number
  - Computers and printers
  - Copier
  - Maps, flip charts, bulletin boards, pens, tape, markers
  - Paper, pens, pencils, stapler and other general office supplies

#### 2. Establishment

In setting up the VRC, the Volunteer Manager should consider the following:

- Arrange space to allow for foot traffic and to maximize wall space.
- Face tables and chairs so that information can be viewed easily.
- Allow enough space, pens, clipboards, etc. so that volunteers can fill out registration materials.
- Clearly identify the reception desk/area.
- Provide seating.
- Post signs directing potential volunteers to the building/room.
- In the event of a large spill response where sufficient staffing is available at the VRC and volunteer needs are extensive, set up stations for each major class of work, such as:
  - o Administrative
  - o Communications
  - Shoreline Operations
  - On-Water Operations
  - Wildlife Recovery/Rehabilitation
  - o Repair/Construction
  - Logistical Support
- Assign early volunteers to staff the Referral Center and to be couriers to bring information about volunteer needs from the Command Center to the VRC.
- Set aside time and space for training and orientation.
- Set up an information bulletin board. This area may serve as an informal information and referral
  area.

Early volunteers should be used to supplement staffing of the VRC. Staffing needs at the VRC will include:

- Receptionist: answers questions, phones, gives out forms & directions
- Data Entry Clerk: enter personnel information into database
- <u>File Clerk</u>: files, copies, sends & receives faxes
- Intake and Referral Personnel: conducts initial screening, matches volunteers with needs
- <u>Communications</u>: compiles updates of volunteer needs, maintains bulletin board
- Training: coordinates/conducts general training & orientation for all volunteers
- Facility Support: maintains equipment, cleanliness, order
- Transportation: assist with transportation as needed
- Courier: serves as go-between for VRC and command center

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It is essential that all volunteers are routed through the VRC. Volunteers arriving on-scene who have not first checked in at the VRC must be referred to the VRC for assignment.

It is important to track volunteers, recognize, and reward their efforts. The following are suggestions for volunteer identification, record keeping and recognition:

- Develop and maintain a database of current interested volunteers and skills using appropriate computer software.
- Develop and distribute an after-action newsletter or report to all volunteers who participated in a spill response.
- Issue identification badges to all volunteers as they are assigned to specific jobs.
- Ensure that all volunteers register at the VRC before placement in a job. Encourage unit leaders or agency personnel to document volunteer hours worked.

If a Responsible Party directs the spill response, volunteer coordination may proceed according to the RP's approved contingency plan. This plan has been designed to facilitate volunteer coordination and promote positive community involvement during all phases of a spill response. If vessel or facility operators in the area have not developed individual volunteer management plans, they are encouraged to incorporate this plan by reference into their state-approved C-plans.

# 4320.4 – Training

Training will be provided to all volunteers assigned to jobs during a response. If, in the future, a preemergency volunteer coordination program is implemented in the AWA Area, volunteers may receive ongoing training and be added to a permanent volunteer roster. This process would facilitate initial activation of trained volunteers.

Training sessions for volunteers should include:

- Basic orientation to this Arctic and Western Alaska Area Plan and the Regional Contingency Plan
- ICS structure, organization, and general and specific job requirements
- Site-specific hazards
- Environmental and cultural concerns related to the response
- Safety and security procedures
- Proper attire and safety equipment
- Safety training (Reference below)
- Liability
- Limitations on non-professionals

Training may also be provided for bird and wildlife rescue and treatment, shoreline cleanup, food distribution, check-in procedures and other response activities.

The initial volunteer training (conducted at the VRC) may be supplemented by additional position-specific training provided once the volunteer is assigned to a job.

Safety training for volunteers should address the following policies and procedures:

- Worker's compensation
- Drug and alcohol policies
- Firearms
- Equipment use
- Limitations for non-professionals

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- Hazwoper
- General safety procedures (buddy system, safe lifting, etc.)
- Evacuation procedures
- Potential hazards of work environment
- First Aid
- Accident Reporting Procedures

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# **VOLUNTEER REQUEST FORM**

Date/time:				
Requesting organization/agence	y/unit:			
Name of contact:		Phone:	Fax: _	
VOLUNTEER NEEDS: Total Num	ber of Volunteers Nee	ded:	_	
Job Title/Description:				
Duties	Experience/S	kills		Training Provided?
Equipment/Special Clothing Ne	eds:			
Brief Description of Training to				
Job Location:	Date/tim	e volunteers neede	d:	
Please check if available:	Restrooms		Parking	
Safety Equipment			tion to Work S	ite
Volunteer(s) should report to t	he following person fo	or additional trainin	ng/instruction	:
Name:	Pł	none:	Location:	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
FOR OFFICE USE ONLY:				
Follow up date & time:	Follow	up action:		
Position(s) filled				
Volunteer name(s):				

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# **VOLUNTEER REGISTRATION FORM**

Name:		Date:		
Phone (day):	(eve.)	E-mail:		
Address:				
Present employer:				
Are you currently affilia	ated with any re	sponse organization/vo	olunteer group?	Please name
Are you certified in any of	the following?	Certification Type/Age	ency Expirati	ion Date
Bird Rescue/Wildlife Hazin	g/Rehab:			
Hazmat/Hazwoper:				
First Aid/CPR:				
USCG licenses:				
Other:				
Placement Preference:	Bird or Wildlife	Rescue/Rehab Sh	oreline/Beach Cle	anup
Administrativ	ve/Clerical Ba	sic Needs/Logistics	On-Water operat	ions
Other				
Emergency Contact - Name				
Phone (day/eve):				
Waiver: Signature:			Date:	
FOR OFFICE USE ONLY:		unnnn		
Training completed	Date complete	ed	Initials	
Placed:				

# <u>4330 – Alternate Planning Criteria</u>

Vessel Response Plans (VRP) are mandated by federal law and are long-standing requirements for tank vessels carrying oil as primary cargo or nontank vessels 400 gross tons or above carrying oil as fuel and/or secondary cargo. VRPs are required to cover all U.S. Captain of the Port zones in which the vessel will transit, operate or make port calls. In remote areas where typical response resources are not available, or the available commercial resources do not meet the national planning criteria, the vessel owner or operator may request that the USCG accept Alternative Planning Criteria (APC). APCs are not required, as they are voluntary alternatives to the national planning standards.

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The intention of an APC is to identify and address resource and capability gaps until private industry response resources are sufficiently built up to meet the national planning standards. Some APCs incorporate prevention measures, such as vessel monitoring, to mitigate gaps between the response resources provided in the APC and the national planning criteria. The USCG considers APC prevention measures to be a temporary, perhaps even long-term alternative, but not a replacement for the national planning criteria. As such, the goal of any APC is continued progress toward improved response capabilities. Operational experience has shown that prevention-based approaches reduce incidents and incident-severity, but cannot be relied upon 100% of the time. Consequently, the growth of actual response capability is a critical facet of APCs and the APC process.

VRPs and APCs are approved by the Office of Marine Environmental Response at USCG Headquarters; however, the Arctic and Western Alaska Area committee plays a key role in advising the USCG prior to plan approval. The Arctic and Western Alaska Area committee *should* include members from the maritime response community including salvage and marine firefighting, oil spill removal organizations and current APC plan administrators. These subject matter experts provide valuable experience and local area knowledge that will identify preferred alternatives, limitations and constraints, and will inform future alternative proposals submitted for USCG approval.

#### **4400 - DOCUMENTATION**

Per the USCG Incident Management Handbook, the Documentation Unit Leader (DOCL) is responsible for the maintenance of accurate, real-time incident documentation. Organization of this documentation is critical to post incident analysis. Examples of incident documentation include IAP(s), incident reports, communication logs, injury claims, and situation status reports. Keep in mind that some of the documents may originate in other sections of the Incident Management Team. The DOCL should ensure each section is maintaining and providing appropriate documents. The DOCL will be the source for duplication and copying services for the Incident Management Team. The Documentation Unit will store incident files for legal, analytical, and historical purposes.

**Minimum Requirements** - Each agency shall immediately implement document control and collection procedures. In all cases telephone logs, correspondence, reports, time records, and field notes shall be considered part of documentation. Numerical document control by all participating agencies and a mechanism for centralized document control and retention shall be instituted at the agency level. All staff shall be subject to a "Check In - Check Out" process through the Resource Unit of the Planning Section to ascertain that vital records are retained onsite.

Additional documentation and data management requirements shall vary by incident. ADEC, in conjunction with the Department of Law, shall establish the documentation and data management requirements for each incident. Attention shall be paid to cost recovery requirements. Each participating agency shall be provided written instructions by ADEC for documentation requirements in excess of minimums.

# <u>4410 – Services Provided-TBD</u>

#### 4420 - Administrative File Organization-TBD

4500 – DEMOBILIZATION - TBD 4510 – Sample Demobilization Plan

Sample Demobilization Plans can be found at the USCG Homeport Website.

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#### 4600 - ENVIRONMENTAL - TBD

The National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC) will work closely with the Environmental Unit but does not typically fill the ENVL position."

# 4610 - Geographic Response Strategies

Reference Section 9740 of this document for Geographic Response Strategies.

### 4620 - Fish & Wildlife Protection Strategies

Reference the following document for various fish and wildlife protection information across the Arctic and Western Alaska area.

• Wildlife Protection Guidelines for Alaska

### 4630 - Potential Places of Refuge

Reference <u>Section 9750</u> of this document for Potential Places of Refuge.

#### <u>4640 – Sensitive Areas</u>

This section is intended for use by the On-Scene Coordinators (OSCs) during the initial phase of a spill event to assist in ascertaining the location and presence of spill-sensitive biological and cultural resources, services, and users in this area. This information is specific to this area. No attempt has been made to duplicate information contained in easily accessible existing documents. This section, therefore, must be used in conjunction with the referenced materials and informational contacts identified herein. More detailed and current information should be available from on-scene resource experts when they become engaged in the response. This information is geared toward early response. If appropriate, natural resources trustees may be conducting natural resource damage assessment (NRDA) activities in conjunction with response activities. Information regarding NRDA activities should be directed to the natural resources trustees or to their appointed NRDA Liaison.

Often, the most detailed, up-to-date biological and resource use information will come from people who live and work in the impacted area. Residents from the local community are often knowledgeable sources for information related to local oceanographic or weather conditions that may be beneficial during a response.

The Alaska Regional Response Team (ARRT) has adopted several documents (see the *Alaska Federal/State Contingency Plan for Response to Oil & Hazardous Substance Discharges/Releases [RCP])* that address decision making to help protect sensitive areas and resources. These documents (and their locations) include:

- ARRT Oil Dispersant Guidelines for Alaska
- In Situ Burning Guidelines for Alaska
- Wildlife Protection Guidelines for Alaska
- Alaska Implementation Guidelines for Federal OSCs for the Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Pollution Contingency Plan Protection of Historic Properties

In addition, Federal OSCs in Alaska are working in cooperation with the U.S. Department of the Interior and the National Marine Fisheries Service to ensure response activities conducted meet Endangered Species Act requirements, in accordance with the 2001 *Inter-Agency Memorandum* 

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of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan

In addition, the *RCP* includes *Shoreline Cleanup and Assessment Guidelines*, which provide helpful information on cleanup options by shoreline type.

Section G of the Area Contingency Plan contains site-specific Geographic Response Strategies (GRSs) for use by responders in protecting key sensitive areas. In addition, Environmental Sensitivity Index (ESI) maps have been produced that illustrate selected sensitive resources and shoreline types.

This section and the guidelines in the *RCP* are also intended for use by facility/vessel operators in developing industry oil spill prevention and contingency plans. For an operator's facility or area of operation, industry contingency plans describe: (a) environmentally sensitive areas and areas of public concern; (b) how sensitive areas would be prioritized during a spill event; and (c) response strategies to protect sensitive areas at risk. The information in industry plans should be consistent with the area contingency plan.

The definition of sensitive resources and their geographic locations requires use of field observations and data available from published and non-published materials or through additional field work. Identifying relative priorities among resources and resource uses takes considerable coordination and discussion among resource management agencies. With the limited time and funds available for area contingency plan development (there are ten such plans covering the state of Alaska), not all the detailed information about every possible resource at risk is included. Future updates to this document will continue to add information relevant to response activities.

The Prince William Sound Environmental Sensitivity Index (ESI) maps provide a concise summary of coastal resources that are at risk if an oil spill occurs. At-risk resources include biological resources (i.e., birds, fish, and marine mammals), sensitive shorelines (i.e., marshes and tidal flats), and human-use resources (i.e., mariculture facilities and parks). ESI maps can assist planners and responders in identifying vulnerable locations, establishing protection priorities, and developing cleanup strategies. The PWS ESI maps were created by NOAA working with state and federal government agencies and industry. The ESI maps are available online at:

http://response.restoration.noaa.gov/maps-and-spatial-data/download-esi-maps-and-gisdata.html#Alaska

or at: http://www.asgdc.state.ak.us/maps/cplans/areas.html.

In addition, a substantial effort to develop and refine a sensitive areas database has been undertaken by Alyeska Pipeline Service Company (Alyeska). This information has undergone extensive federal and state agency review and is incorporated, by reference, into this section (with the permission of Alyeska). The Alyeska information is available on a data disk, termed the Graphical Resource Database, as part of the Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan, Part 3, Supplemental Information Document (SID) #3, Section 2, and is not duplicated herein. An online version also exists, but is password protected. The GRD is not publically available and Alyeska permissions are required for this information.

Many of the maps presented in this section are available online at: <a href="http://www.asgdc.state.ak.us/maps/cplans/areas.html">http://www.asgdc.state.ak.us/maps/cplans/areas.html</a>.

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Suggestions, comments, and more current information are requested. Please contact either:

Scientific Support Coordinator NOAA Emergency Response Division 510 L Street, Suite 100 Anchorage, Alaska 99501 mobile: (907) 529-9157

email: <a href="mailto:catherine.berg@noaa.gov">catherine.berg@noaa.gov</a>

Alaska Department of Fish and Game Habitat Division 333 Raspberry Road Anchorage, Alaska 99518 (907) 267-2342

email: jeanette.alas@alaska.gov

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4640.1 - Information Sources

Agency	Resources	Point of contact
Fish and wildlife and habitat resou	rces	
Alaska Department of Fish and Game	Fish, shellfish, birds, terrestrial mammals, marine mammals	Division of Habitat Anchorage 267-2342
U.S. Department of the Interior	Migratory birds, sea otters, endangered species, anadromous fish in freshwater, bald eagles, wetlands	Office of Environmental Policy & Compliance Anchorage 271-5011
U.S. Department of Commerce, National Marine Fisheries Service	Species protected by the Endangered Species Act and Marine Mammal Protection Act including sea lions, seals, whales, and listed anadromous fish in marine waters	Protected Resources Division Anchorage 586-7235
U.S. Department of Commerce, National Marine Fisheries Service	Essential fish habitat	Habitat Conservation Division Anchorage 271-5006
U.S. Department of Commerce, National Marine Fisheries Service	Effects of oil on fisheries resources, hydrocarbon chemistry, dispersants	Alaska Fisheries Science Center Auke Bay Laboratory 789-6000
U.S. Department of Agriculture	National forest lands	Chugach National Forest Anchorage 743-9513
University of Alaska	Rare and endangered plants	Alaska Natural Heritage Program Anchorage 257-2785
Cultural and archaeological sites		
Alaska Department of Natural Resources	Historic sites, archaeological sites, national register sites	Alaska Office of History and Archaeology Anchorage 269-8721
U.S. Department of the Interior	Archaeological/historical sites in park and wildlife refuge system units, public lands, Native allotments/trust lands, sunken vessels	Office of Environmental Policy & Compliance Anchorage 271-5011

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Agency	Resources	Point of contact	
U.S. Department of Agriculture	Archaeological/historical sites on national forest lands	Chugach National Forest Anchorage 743-9513	
Chugach Alaska Corporation	Archaeological/historical sites on native corporation lands		
Shoreline types			
U.S. Department of Commerce, National Oceanic & Atmospheric Administration	Shoreline types, environmental sensitivity index maps	Scientific Support Coordinator Anchorage 428-4160 or 428-4143	
Land ownership and classifications	s/designations		
Alaska Department of Natural Resources	State lands, state parks and recreation areas, state forests, tidelands	Division of Mining, Land, and Water Anchorage 269-8565	
Alaska Department of Fish and Game	State game refuges, state critical habitats	Division of Habitat Anchorage 267-2342	
U.S. Department of the Interior	National parks and preserves, national historic sites, national monuments, national wildlife refuges, public lands, national recreation areas, wild and scenic rivers, wilderness areas, Native trust lands	Office of Environmental Policy & Compliance, Anchorage	
U.S. Department of Agriculture	National forests, national monuments, wild and scenic rivers, wilderness areas, research natural areas	Chugach National Forest Anchorage 743-9513	
U.S. Department of Defense	Military installations and reservations	Alaska Command Anchorage 552-3944	

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Agency	Resources	Point of contact	
Local governments:		For the current local government contact information,	
–cordova	Municipal and private lands, and rights-of-way	go to b. Resources section, part one community profiles	
–valdez	with the private lands, and rights-of-way	go to b. Nesources section, part one community promes	
– whittier		For the current tribal contact information, go to b.	
	Coastal program special areas, plans, policies	Resources section, part three information directory,	
Chugach alaska corporation	Coastal program special areas, plans, policies	native organizations and federally recognized tribes	
		Thative organizations and reactally recognized tribes	
Commercial harvest			
Alaska Department of Fish and	Fishing permits, seasons	Commercial Fisheries Division	
Game		Anchorage	
Gaine		267-2105	
Alaska Danartment of Natural		Division of Mining, Land, and Water	
Alaska Department of Natural	Tideland leases	Anchorage	
Resources		269-8565	
Alaska Danartmant of		Division of Environmental Health	
Alaska Department of Environmental Conservation	Seafood processing	Juneau	
Environmental Conservation		269-7644	
II.C Description of Commence		Sustainable Fisheries Division	
U.S. Department of Commerce National Marine Fisheries Service	Fishing permits, seasons	Juneau	
National Marine Fisheries Service		586-7228	
Subsistence, personal, and sport us	ses		
Alaska Danartmant of Fish and	Subsistance and personal uses statewide and	Sport Fish Division	
Alaska Department of Fish and	Subsistence and personal uses statewide and	Anchorage	
Game	navigable waters, sport hunting and fishing	267-2218	
	Subsistence uses on Federal lands and	Office of Environmental Policy & Compliance,	
U.S. Department of the Interior	reserved waters; subsistence uses of: sea	Anchorage	
·	otters and migratory birds	271-5011	
	Subsistance use of wholes normaises seeds	Protected Resources Division	
U.S. Department of Commerce	Subsistence use of: whales, porpoises, seals, sea lions	Juneau	
	Sea HOTIS	586-7235	
Recreation and tourism uses			

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Agency	Resources	Point of contact	
Alacka Department of Natural	State parks and recreation areas, anchorages,	Division of Parks and Outdoor Recreation	
Alaska Department of Natural	boat launches, campgrounds, State public	Anchorage	
Resources	lands	269-8400	
Alaska Department of Fish and		Division of Habitat	
Game	Sport hunting and fishing	Anchorage	
Game		267-2342	
Alaska Department of Commerce,	Seasonal events and activities, travel, outdoor	Alaska Office of Tourism Development	
Community & Economic	activities, local visitor bureaus, tourism	Juneau	
Development	industries	465-5478	
	Describe was in real and wildlife refere	Office of Environmental Policy & Compliance,	
U.S. Department of the Interior	Recreation uses in park and wildlife refuge	Anchorage	
	system units and Federal public lands	271-5011	
	Campgrounds, cabins, recreation areas, trails,	Chugach National Forest	
U.S. Department of Agriculture		Anchorage	
	within the national forest system	907-743-9513	
Water intake and use facilities			
Alaska Department of	Public drinking water wells, treatment, and	Division of Water	
Environmental Conservation	storage, fish processing facilities	Anchorage	
Livil Offinerital Conservation	Storage, fish processing facilities	269-7601	
Alaska Donartmont of Eigh and	Hatcheries assan not none and release sites	Division of Habitat	
Alaska Department of Fish and	Hatcheries, ocean net pens and release sites,	Anchorage	
Game	aquaculture	267-2342	
Alaska Donartment of Natural	Tidelands leases, aguaculture sites, private	Division of Mining, Land, and Water	
Alaska Department of Natural Resources	Tidelands leases, aquaculture sites, private	Juneau	
Resources	logging camps and log transfer facilities	465-3400	
		Sector anchorage	
U.s. coast guard	Marinas and docks, mooring buoys	Anchorage	
		271-6700	

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#### 4640.2 - Areas of Environmental Concern

The following relative priority listing was developed by the Sensitive Areas Work Group, with representatives from state and federal agencies and the private sector. The list identifies priorities for resources by designations of major, moderate, and lesser concern. Resources are not prioritized within each designation. These designations are for consideration in initial spill response activities, they are not applicable to extended cleanup activities. This prioritization scheme must be used in conjunction with spill-specific information (e.g., size and location of spill, type of product, trajectory) to determine the actual protection priorities for that discharge. Specific guidance to On-Scene Coordinators for protecting cultural resources is contained in the *RCP*.

The following criteria were developed as a tool to establish levels of concern. These criteria are not listed in a priority order.

#### **CRITERIA FOR RELATIVE PRIORITY RATING:**

- Human economic disruption economic/social value; human food source disruption
- Mortality wildlife, fish, other organisms (how many potentially killed in relation to abundance)
- Animal displacement and sensitivity to displacement
- Aesthetic degradation
- Habitat availability and rarity
- Sublethal effects, including sensitivity to physical or toxic effects of oil or hazardous substances, and long-term affects to habitat, species, or both
- Threatened and endangered species, and/or other legal designation
- Persistent concentration of oil or hazardous substances
- Reproduction rate or re-colonizing potential
- Relative importance to ecosystem
- Potential for physical contact with spill–pathway of oil or hazardous substances
- Resource sensitivity to response countermeasures

#### AREAS OF MAJOR CONCERN:

- Threatened or Endangered and Protected Species Habitat
  - o Steller's Eider Wintering Areas
  - o Steller Sea Lion Rookeries, Haulouts, and Critical Habitat
  - Humpback and Fin Whale Foraging Areas
- Shoreline Geomorphology Coastal Habitat Types:
  - Marshes
  - o Eelgrass Beds
  - o Sheltered Tidal Flats
  - Sheltered Rocky Shores
- Identified sand lance habitat
- Sea Otter Concentration Areas (> 20)
- Harbor Seal Haulout Areas (> 10)
- Large Seabird Colonies (> 5,000)
- Seabird Feeding Concentration Areas
- Pigeon Guillemot Nesting and Immediate Nearshore Feeding Areas
- Waterfowl and Shorebird Spring, Fall, or Winter Concentration Areas
- Eagle Nest Sites

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- Anadromous Fish Streams:
  - o > 25,000 pink or chum spawners
  - o 5,000 coho salmon
  - o 1,000 sockeye spawners
- Intertidal Salmon Spawning Areas
- Large Freshwater Fish Systems
- Herring Spawning Area
- Land Management Designations
  - o Federal:
    - Wilderness
    - Wild and Scenic Rivers
    - National Natural Landmarks
  - o State:
    - Refuges
    - Sanctuaries
    - Critical Habitat Areas
- Cultural Resources/Archaeological Sites:
  - National Historic Landmarks
  - o Burial Sites
  - National Register Eligible Village Sites
  - o Intertidal Sites
- High Use Subsistence Harvest Areas
- High Use Commercial Areas (including, but not limited to, setnet sites, aquaculture sites, hatcheries, etc.)
- High Use Recreational Areas

### **AREAS OF MODERATE CONCERN:**

- Species of Concern Habitat (Possible Threatened or Endangered)
- Shoreline Geomorphology Coastal Habitat Types:
  - o Gravel Beaches
  - o Mixed Sand & Gravel Beaches
  - Exposed Tidal Flats
  - o RIPRAP
- Coarse Grained Sand Beaches
- Sea Otter General Distribution Areas (< 20)</li>
- Foraging/Transit Habitat for Minke Whales, Killer Whales, Dall's Porpoise, and Harbor Porpoise
- Harbor Seal Haulouts (5-10)
- Seabird Colonies (1,000 5,000)
- Waterfowl and Shorebird Nesting or Molting Concentration Areas
- Anadromous Fish Streams:
  - o 500 25,000 pink or chum spawners
  - o 1,000 5,000 coho spawners
  - $\circ$  50 1,000 sockeye spawners
- Moderately Sized Freshwater Fish Systems
- Clam Beds
- Bear Spring Concentration Areas

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- Sitka Deer Coastal Feeding Concentration Areas
- Caribou Migration Routes
- Other Subsistence Harvest Areas
- Other Commercial Harvest Areas
- Other Recreational Use Areas
- Land Management Designations
  - o Federal:
    - National Parks
    - National Wildlife Refuges
    - Research Natural Areas
    - Native Allotments
  - o State:
    - State Parks
- Cultural Resources/Archaeological Sites
  - National Register Eligible Sites (Other Than Village Sites)
  - Sites Adjacent To Shorelines

#### **AREAS OF LESSER CONCERN:**

- Coastal Geomorphology Coastal Habitat Types:
  - o Fine-grained Sand Beaches
  - o Exposed Wave-cut Platforms
  - Exposed Rocky Shores
- Harbor Seal Haulouts (< 5)</li>
- Seabird Colonies (< 1,000)</li>
- Raptor Feeding Areas
- Waterfowl and Shorebird General Distribution Areas
- Bear Fall Concentration Areas
- Anadromous Fish Streams:
  - o < 1,000 coho spawners
  - o < 500 pink or chum spawners</p>
  - o < 50 sockeye spawners</p>
- General Freshwater Fish Habitat
- Land Management Designations
  - o Federal:
    - Public Lands
    - National Forests
    - National Preserves
  - o State:
    - General Public Lands

NOTE: Chinook salmon occur in relatively small numbers in association with sockeye salmon, therefore, prioritization is based on the number of sockeye spawners.

#### **AREAS OF LOCAL CONCERN:**

Some areas within the Prince William Sound area warrant special attention due to the presence of highly productive wildlife habitat, the ability to sustain a large part of a villages' subsistence needs, the occurrence of unusual historical sites or large mineral deposits, recreation, energy development,

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hazardous areas, or the presence of important fisheries. These have been identified as Areas Meriting Special Attention, Important Use Areas, Special Use Areas, or Sensitive Areas through the City of Cordova, Coastal Management Program, Eyak Lake AMSA Cooperative Management Plan (Cordova), Valdez Coastal Management Program, or Whittier Coastal Management Plan. They are summarized below.

DE	SIGNATED AREA	REASONS FOR DESIGNATION	LAND OWNERSHIP/ VILLAGES TO CONTACT
1.	Eyak Lake	Important watershed area. Concern for protection of water quality. Presence of a variety of aquatic plants. Site provides habitat and breeding grounds for wildlife, birds (proximity to major bird migration routes) and fish. Area used for commercial, sport and subsistence fishing. Area used for recreational and scenic purposes.	Eyak Corporation, State
2.	Keystone Canyon	Area used for recreational, scenic and transportation purposes. Historical value.	State
3.	Mineral Creek Canyon	Site is an aquifer recharge area. Presence of historic sites. Area used for recreational and scenic purposes.	State
4.	Robe Lake	System supports salmon, char and Dolly Varden; provides spawning and rearing habitat. Area provides habitat for waterfowl and marsh nesting birds as well as feeding grounds for brown/grizzly bears. Robe Lake is also a high recreational use area for Valdez residents.	State
5.	Shotgun Cove/Emerald Bay Subdivision	Human use (harbor). Unique and vulnerable geologic and topographic features. Offers recreational opportunities.	(Tidelands) State (Upland areas) Chugach Alaska Corporation, City of Whittier, Federal, U.S. Forest Service, State
6.	Valdez Duck Flats/Mineral Creek Islands	Highly productive biological area. Provides habitat for a variety of waterfowl, small mammals and marine mammals. Site is an important feeding area for migrating waterbirds during spring and fall.	City of Valdez, private, State
7.	Whittier Port and Harbor	Port development. Offers recreational opportunities.	State (Public lands) Alaska Department of Natural Resources, Alaska Railroad, City of Whittier, U.S. Department of the Army Chugach Alaska Corporation (Native corporate lands)

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# 4640.3 - Resource Sensitivity

The following sensitivity tables were developed by the State and Federal Natural Resources Trustees with legislative responsibility for management and protection of these resources. This includes the following agencies: National Marine Fisheries Service, U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Alaska Department of Fish and Game, and Alaska Department of Natural Resources. This information is a summary derived from recent field studies, research reports, long-term monitoring, stakeholder input, and local knowledge. Periods and/or conditions when resources are of varying levels of concern (low, medium, high) with respect to affects from an oil spill are noted in the following tables. Susceptibility for each group of animals is year-round unless otherwise noted in the Seasonal Sensitivity row that is added for the appropriate animal groups.

#### **SHORELINE GEOMORPHOLOGY**

Category	Low	Medium	High
Coastal habitat types	Fine-grained sand beaches Exposed wave-cut platforms Exposed rocky shores	Gravel beaches Mixed sand & gravel beaches Exposed tidal flats Coarse grained sand beaches Rip rap structures	Marshes Eelgrass beds Sheltered tidal flats Sheltered rocky shores
Lake and river habitat types	Exposed rocky cliffs & banks Bedrock shores & ledges, rocky shoals Eroding scarps/banks in unconsolidated sediment Exposed man-made structures	Sand beaches & bars Mixed sand & gravel beaches/bars Gravel beaches/bars Gently sloping banks Exposed flats Riprap	Sheltered scarps in bedrock Vegetated steep sloping bluffs Sheltered man- made structures Vegetated low banks Sheltered sand & mud & muddy substrates Marshes
Upland habitat types	To be developed	To be developed	To be developed

#### THREATENED OR ENDANGERED SPECIES

Category	Low	Medium	High
Endangered species			Whales: blue, bowhead, fin, humpback, north pacific gray, north pacific right, sei, sperm  Pinnipeds: steller sea lion (western dps)  Birds: short-tailed albatross  Reptiles: leatherback sea
			turtle

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Threatened species		Birds: steller's eider
species of concern	<b>Birds:</b> harlequin duck, black scoter, barrow's goldeneye, yellow-billed loon, pelagic cormorant, northern goshawk, marbled murrelet, kittlitz's murrelet, peregrine falcon, olive-sided flycatcher	
	Mammals: north american lynx, montague tundra vole, harbor seal	
	Plants: draba yukonensis	

# **SEA OTTERS**

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE		< 20	> 20
HUMAN HARVEST	Year-round		

Sea Otter Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Present nearshore												
Pupping												

# **HARBOR SEALS**

Category	Low	Medium	High
Abundance (on haulouts)	< 5	5 - 10	> 10
Human harvest	June 1 – Aug 31	Sept 1 - Sept 30	Oct 1 - May 31

Harbor Seal Critical Life Periods												
	J	F	M	Α	M	J	J	Α	S	0	N	D
Pupping												
Molting												
On Haul outs												

# **STELLER SEA LIONS**

Category	Low	Medium	High
Abundance (On Haulouts)	< 15	15 - 30	> 30
Human Harvest		April 1 - May 31	Sept 1 - March 31

Stellar Sea Lion Critical Life Periods												
	J	F	M	А	М	J	J	Α	S	0	N	D
Pupping												
Molting												
On Rookeries								-				
On Haulouts												

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# **WHALES and PORPOISES**

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 10	10 - 50	> 50
Seasonal Susceptibility	Oct 1 - May 1	Aug 1 - Sept 30	May 1 - July 31
Human Harvest	Sept 1 - June 1		

Whales and Porpoises Critical Life Periods												
	J	F	М	Α	M	J	J	Α	S	0	N	D
Present near shore												
Calving				?				?				

# **BEARS**

# (Brown and Black)

Category	Low	Medium	High
Seasonal Susceptibility <sup>1,2</sup>	Nov 1 - April 30	May 1 - June 30 Sept 1 - Oct 31	July 1 - Aug 30
Commercial Value	Nov 1 - May 31 July 1 - Aug 31	June 1 - June 30	Sept 1 - Oct 31
Human Harvest	Nov 1 - April 15		April 15 - Oct 31

- 1. Bear densities and susceptibility to oil impacts increases through spring as more individuals emerge from dens and move to coastal areas.
- 2. Bear densities and susceptibility to oil impacts decreases through the summer depending upon the availability of fish in lower reaches of streams.

Bear Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Denning												
Feeding in coastal areas												
Feeding along salmon streams												

# **SITKA BLACK-TAILED DEER**

CATEGORY	LOW	MEDIUM	HIGH
SEASONAL SUSCEPTIBILITY	May 1 - Nov 15		Nov 15 - April 30
HUMAN HARVEST	Jan 1 – July 31		Aug 1 - Dec 31

Sitka Black-Tailed Deer Critical Life Periods												
	J	F	М	Α	M	J	J	Α	S	0	N	D
Fawning Period												
Foraging along coast												

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# **CARIBOU**

CATEGORY	LOW	MEDIUM	HIGH
SEASONAL SUSCEPTIBILITY	Nov 1 - Feb 28		Mar 1 - May 31
	June 1 - July 31		Aug 1 - Oct 31
HUMAN HARVEST	April 1 - Aug 10		Jan 1 - Mar 31
	Sept 20 - Dec 31		Aug 10 - Sept 20

Caribou Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Migrations												
Calving												
Wintering Concentrations												

# **LOONS AND GREBES**

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 10	10-100	> 100
SEASONAL	May 16 Aug 14	April 15 - May 15	Nov 1 - April 14
SUSCEPTIBILITY	May 16 - Aug 14	Aug 15 - Oct 31	-

Loon and Grebe Critical Life Periods												
	J	F	M	Α	М	J	J	Α	S	0	N	D
Spring Migrations												
Fall Migrations												
Wintering Concentrations												

# **WATERFOWL**

# (Ducks and geese)

<u>,                                     </u>			
CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 100	100 - 1,000	> 1,000
SEASONAL	Nov 1 - Jan 31 <sup>5</sup>	Feb 1 - April 14	April 15 - May 15
SUSCEPTIBILITY		May 16 - Aug 14	Aug 15 - Oct 31
SPECIES DIVERSITY	1-3	4-6	> 6
HUMAN HARVEST	June 1 - Aug 31	Dec 1 - Dec 31	Jan 1 - May 31
			Sept 1 - Nov 30

5. In Areas of Local Concern, (e.g., Valdez Duck Flats) where waterfowl concentrate during the winter, their susceptibility would be high.

Waterfowl Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Spring Migration												
Nesting/Rearing												
Fall Migration												
Winter Concentrations												

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## **MIGRATING SHOREBIRDS**

# (Sandpipers, surfbirds, dunlins, and plovers)

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 100	100 - 1,000	> 1,000
SEASONAL	Nov 1 - Jan 31 May	Feb 1 - April 14	April 15 - May 15
SUSCEPTIBILITY	16 - Aug 14	reb 1 - April 14	Aug 15 - Oct 31
SPECIES DIVERSITY	1	2-4	> 4

Shorebirds Critical Life Pe	riods											
	J	F	М	Α	М	J	J	Α	S	0	N	D
Spring Migration												
Fall Migration												

# **COLONIAL SEABIRDS**

# (Cormorants, Murres, Auklets, Puffins, Kittiwakes, Gulls, and Terns)

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 1000	1000 - 5000	> 5000
SEASONAL SUSCEPTIBILITY <sup>7</sup>	Oct 1 - Jan 31	Feb 1 - March 31	April 1 - Sept 30
SPECIES DIVERSITY	1-3	4-6	> 6
HUMAN HARVEST <sup>8</sup>	June 1 - April 19		April 20 - May 31

- 7. Some species such as the common murre become more abundant in winter months.
- 8. Seabird eggs utilized by Native communities.

Seabirds Critical Life Periods												
	J	F	М	Α	M	J	J	Α	S	0	N	D
On Colonies												
Feeding near colonies												

# **OTHER SEABIRDS**

# (Pigeon guillemots, Murrelets, and others)

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 10	10-20	> 20
SEASONAL SUSCEPTIBILITY	Nov 1 - Jan 31	Feb 1 - March 31	April 1 - Oct 31
SPECIES DIVERSITY	1	2-3	>3

Seabirds Critical Life Periods												
	J	F	M	Α	М	J	J	Α	S	0	N	D
On Colonies												
Feeding near colonies												

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# RAPTORS (Generally Bald eagles)

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 1 nest/3 coastal miles	1 nest/1 to 3 coastal miles	> 1 nest/coastal mile

Raptors (generally eagles) Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Nesting/Rearing												
Present near coast												

**HERRING** (including capelin/hooligan)

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE (Biomass	< 500	500 - 5,000	> 5,000
in Tons)			
SEASONAL	Oct 1 - Feb 28	March 1 - March 31	April 1 - Sept 30
SUSCEPTIBILITY			
HUMAN HARVEST	Jan 1 - Feb 28	June 1 - Dec 31	March 1 - May 31

Herring Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	N	D
Spawning												
Present nearshore												

**SALMON (including hatchery fish)** 

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	< 500 spawners (pink & chum) < 50 spawners (sockeye) < 1,000 spawners (coho)	500 - 25,000 (pink & chum) 50 - 1,000 (sockeye) 1,000 - 5,000 (coho)	> 25,000 (pink & chum) > 1,000 (sockeye) > 5,000 (coho)
SEASONAL SUSCEPTIBILITY	Dec 1 - Jan 31	Feb 1 - April 30 Nov 1 - Nov 30	May 1 - Oct 31
SPECIES DIVERSITY	2 or less	3 - 4	4 and greater
HUMAN HARVEST		Oct 10 - May 15	May 15 - Oct 10

Salmon (including hatchery fish)	Critical	Life	erious	·	1		-	-		1	1	
	J	F	M	Α	M	J	J	Α	S	0	N	D
Adults nearshore												
Spawning in streams												
Spawning intertidally												
Eggs/young development												
Smolt outmigration												
Adults return - interior												

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# **FRESHWATER FISH SPECIES**

# **GRAYLING**

CATEGORY	LOW	MEDIUM	HIGH
ABUNDANCE	<50,000	50,000-100,000	>100,000
SEASONAL	Nov 1 - March 31	June 1 - Oct 31	April 1 - May 31
SUSCEPTIBILITY			-
HUMAN HARVEST	Nov 1 - March 31	Oct 1 - Oct 31	April 1 - Sept 30

Grayling Critical Life Periods												
	J	F	М	Α	M	J	J	Α	S	0	N	D
Adults Near Shore												
Spawning in Streams												
Eggs/young Development												

# **DOLLY VARDEN**

CATEGORY	LOW	MEDIUM	HIGH
Abundance	<20	20 – 50	>50
Seasonal Susceptibility	Dec 1 - Feb 28	June 1 - Aug 31	March 1 - May 31 Sept 1 - Nov 30
Human Harvest	Jan 1 - Feb 28	June 1 - Aug 31 Nov 1 - Dec 31	March 1 - May 31 Sept 1 - Oct 31

Dolly Varden Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	Ν	D
Adults Near Shore												
Spawning in Streams												
Eggs/young Development												

# **CUTTHROAT TROUT**

CATEGORY	LOW	MEDIUM	HIGH
Abundance	<20	20 - 50	>50
Seasonal Susceptibility	Dec 1 - Feb 28	June 1 - Aug 31	March 1 - May 31 Sept 1 - Nov 30
Human Harvest	Jan 1 - Feb 28	June 1 - Aug 31 Nov 1 - Dec 31	March 1 - May 30 Sept 1 - Oct 31

Cutthroat Trout Critical Life Perio	ds											
	J	F	М	Α	М	J	J	Α	S	0	N	D
Adults Near Shore												
Spawning in Streams												
Eggs/young Development												

# **RAINBOW/STEELHEAD TROUT**

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 500	500 - 2,000	> 2,000
Seasonal Susceptibility	Oct 16 - Nov 30	Dec 1 - Feb 28	March 1 - Oct 15
Human Harvest	Oct 16 - Nov 30	Dec 1 - Feb 28	March 1 - Oct 15

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Rainbow/Steelhead Trout Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	Ν	D
Adults Near Shore												
Spawning in Streams												
Eggs/young Development												

# **LAKE TROUT**

CATEGORY	LOW	MEDIUM	HIGH
Abundance	< 3,000	3,000 - 6,000	> 6,000
Seasonal Susceptibility	May 1 - May 31 Nov 1 - Nov 30	Dec 1 - April 30 June 1 - Aug 31	Sept 1 - Oct 31
Human Harvest	Oct 1 - Nov 30	Dec 1 - May 31 July 1 - Aug 31	June 1 - June 30 Sept 1 - Sept 30

Lake Trout Critical Life Periods												
	J	F	М	Α	М	J	J	Α	S	0	Ν	D
Adults Near Shore												
Spawning in Streams												
Eggs/young Development												

# **CLAMS and OTHER MARINE INVERTEBRATES (CHITONS)**

CATEGORY	LOW	MEDIUM	HIGH
HUMAN HARVEST		June 1 - Aug 31	Sept 1 - May 31

Clams and Other Marine Invertebrates (Chitons)Critical Life Periods												
	J	F	M	Α	M	J	J	Α	S	0	N	D
Spawning												
Planktonic Larvae												

# **LAND MANAGEMENT DESIGNATIONS**

Category	Low	Medium	High
Federal Lands	Public Lands National Forests Preserves	National Parks Wildlife Refuges	Wild & Scenic Rivers Green Island Research Natural Area Copper River Delta National Natural Landmarks Wilderness Areas
State Lands	Public Lands <sup>1</sup>	State Parks	Critical Habitats Refuges

1. Includes submerged lands out to 3 miles, and historic bays and inlets

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## **CULTURAL RESOURCES/ARCHAEOLOGICAL SITES**

CATEGORY	LOW	MEDIUM	HIGH
Cultural And Archaeological Sites	Cultural Resources that do not meet National Register criteria	National Register eligible sites (excluding village sites) Sites adjacent to shorelines	National Historical Landmarks Burial sites National Register eligible village sites Intertidal sites

## 4640.4 - Biological and Human Use Resources

**INTRODUCTION**: The background information contained in this section is a mixture of references to readily available documents, knowledgeable contacts, and data not readily available elsewhere. Industrygenerated references that have had agency input and review are incorporated by reference.

For coastal information, see the <u>Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan (Tanker Plan)</u> (November 2012) by the Prince William Sound Response Planning Group, and Part 3, Supplemental Information Document (SID) #3, Section 2, which contain background information and data descriptions, including:

- 1. Salmon and other Anadromous Fish
- 2. Pacific Herring
- 3. Halibut and Groundfish
- 4. Crabs and Shrimp
- 5. Other Intertidal/Subtidal Invertebrates (Mussels, Clams, Oysters)
- 6. Birds (Water-Related, Shorebirds, Seabirds, Raptors)
- 7. Marine Mammals (Cetaceans, Pinnipeds, Sea Otters)
- 8. Terrestrial Mammals
- 9. Threatened and Endangered Species
- 10. Commercial Fisheries
- 11. Sport Fisheries
- 12. Human Use of Wildlife Resources
- 13. Subsistence Utilization of Fish and Wildlife Resources

The Tanker Plan's automated Graphical Resource Database (November 2004) currently consists of the following data layers:

--Aerial Photo Locations

--Aquaculture Sites

--Commercial Fishing Areas-Salmon

--Community Sensitive Sites--Equipment Storage Sites--Historic Harbor Seal Sites--Herring Spawning Areas

--Marine Features

--Recreation/Tourism Areas

--Salmon Streams--all

--Sea Lion Sites

-- Geographic Response Strategies

--Salmon Collection & Release Sites

--Communities

--Bald Eagle Nest Sites --Harbor Seal Sites --Harbor Seal Areas

-- Hatchery Sites --Marsh Shoreline --Research Areas

--Salmon Index Streams

--Sea Otter Concentration Areas

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- --Seabird Colonies
- --Small Boat Harbors
- --Waterfowl Concentration Areas
- --Shoreline Cleanup Assessment Team
- -- Eelgrass Bed Locations
- --Port Valdez Sensitive Area Tactical Guide
- --200 Foot Topographic Contours
- --Narrow Rivers
- --Tidal Flats
- --Shoreline

- --Sheltered Tidal Flats
- --Subsistence Areas
- --Whales
- -- Land Features
- --Valdez Marine Terminal
- --NOAA Charts
  - --Wide Rivers and Lakes
  - --Land
  - --Chugach National Forest Shoreline

The Prince William Sound Environmental Sensitivity Index (ESI) maps provide a concise summary of coastal resources that are at risk if an oil spill occurs. At-risk resources include sensitive shorelines, biological resources, and human-use resources as listed below:

#### Shoreline Habitats

- o Exposed rocky shores
- Exposed wave-cut platforms in bedrock
- o Fine- to medium-grained sand beaches
- Mixed sand and gravel beaches
- o Gravel beaches
- o Riprap
- Exposed tidal flats
- Sheltered rocky shores
- o Sheltered rocky rubble slopes
- Sheltered tidal flats
- Salt- and brackish-water marshes
- Sensitive Biological Resources
  - Threatened and Endangered species
  - o Birds
    - Diving birds
    - Gulls and terns
    - Alcid and pelagic birds
    - Raptors
    - Shorebirds
    - Waterfowl
    - Nesting sites
  - o Fish
  - o Anadromous streams
  - Invertebrates
  - Marine Mammals
    - Pinnipeds
    - Whales
    - Sea Otters
- Human Use Features
  - o Airports
  - Aquaculture sites
  - o Hatcheries
  - Marinas and anchorages

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The PWS ESI maps are available online at: <a href="https://response.restoration.noaa.gov/maps-and-spatial-data/download-esi-maps-and-gis-data.html">https://response.restoration.noaa.gov/maps-and-spatial-data/download-esi-maps-and-gis-data.html</a>

The Graphical Resource Database also covers the Copper River Delta and coastal resources from the eastern Kenai Peninsula coast to Shelikof Strait, including Kodiak. The GRD is proprietary software and requires permissions and registration with Alyeska Pipeline Service Company.

See the Environmental Atlas of the Trans Alaska Pipeline System (May 2013, by Alyeska Pipeline Service Company (Alyeska Atlas). The Environmental Atlas, normally accessible by APSC employees and registered users electronically, also has a hard copy version consisting of 25 maps covering the length of the Trans-Alaska Pipeline System (TAPS) and brief narratives about mammals, birds and fish found along the TAPS corridor. Each map has an overlay with the following types of information identified:

- 1. Recreation Sites/Areas
- 2. Scenic Areas
- 3. Special Areas
- 4. Subsistence Use Areas
- 5. Wildlife Areas (bears, bison, caribou, sheep, fox, wolf, grouse, moose, otter, raptor, swan, waterfowl, whale)
- 6. Fish Hatchery
- 7. Fish Stream (Anadromous, Non-anadromous, Overwinter)
- 8. Site, Den or Nest
- 9. Direction of View, Migration, Movement or Distribution
- 10. Oil Spill Containment Site

#### 4640.4.1 - Habitat Types

Shoreline habitats have been defined and ranked according to Environmental Sensitivity Index (ESI) standards produced by the National Oceanic and Atmospheric Administration (NOAA) in *Environmental Sensitivity Index Guidelines* (October 1997). Seasonal ESI maps in poster and atlas formats have been produced for the area, as shown on the following index map. These maps are available on the internet at: <a href="http://www.asgdc.state.ak.us/maps/cplans/areas.html">http://www.asgdc.state.ak.us/maps/cplans/areas.html</a>. NOAA has an online ESI Data Viewer to access these maps at <a href="http://response.restoration.noaa.gov/maps-and-spatial-data/environmental-sensitivity-index-esi-maps.html">http://response.restoration.noaa.gov/maps-and-spatial-data/environmental-sensitivity-index-esi-maps.html</a>.

- 1. Benthic Habitats Oil vulnerability is lower in benthic (near bottom) areas than in the intertidal zone since contamination by floating slicks is unlikely. Sensitivity is derived from the species which use the habitat. Benthic habitats have not been traditionally classed by ESI rankings, but are treated more like living resources which vary with season and location. Benthic habitats include: submerged aquatic vegetation beds, large beds of kelp, worm reefs, and coral reefs.
- 2. Shoreline Habitats Habitats (estuarine, large lacustrine and riverine) ranked from least (#1) to most (#10) sensitive (see the following table) are described below:

ESI #1--Exposed impermeable vertical substrates: exposure to high wave energy or tidal currents on a regular basis, strong wave-reflection patterns common, substrate is impermeable with no potential for subsurface penetration, slope of intertidal zone is 30 degrees or greater, attached organisms are hardy and accustomed to high hydraulic impacts.

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ESI #2--Exposed impermeable substrates, non-vertical: exposure to high wave energy or tidal currents on a regular basis, strong wave-reflection patterns regular, substrate is impermeable with no potential for subsurface penetration over most of intertidal zone, slope of intertidal zone is less than 30 degrees, there can be accumulated but mobile sediments at the base of cliff, attached organisms are hardy and accustomed to high hydraulic impacts.

ESI #3--Semi-permeable substrate: substrate is semi-permeable with oil penetration less than 10 cm, sediments are sorted and compacted, slope is less than 5 degrees, sediment and potential for rapid burial mobility is low, surface sediments are subject to regular reworking by waves, there are relatively low densities of infauna.

ESI #4--Medium permeability substrate: substrate is permeable with oil penetration up to 25 cm, slope is 5 to 15 degrees, rate of sediment mobility is high with accumulation of up to 20 cm of sediments in a single tidal cycle, sediments are soft with low trafficability, low densities of infauna.

ESI #5--Medium to high permeability substrate: substrate of medium to high permeability which allows oil penetration up to 50 cm, spatial variations in distribution of grain sizes with finer ones at high tide line and coarser ones in the storm berm and at toe of beach, 20 percent is gravel, slope between 8 and 15 degrees, sediment mobility is high during storms, sediments are soft with low trafficability, low populations infauna and epifauna except at lowest intertidal levels.

ESI #6--High permeability substrates: substrate is highly permeable with oil penetration up to 100 cm, slope is 10 to 20 degrees, rapid burial and erosion of shallow oil can occur during storms, high annual variability in degree of exposure and frequency of wave mobilization, sediments have lowest trafficability of all beaches, natural replenishment rate is the lowest of all beaches, low populations of infauna and epifauna except at lowest intertidal levels.

ESI #7--Exposed flat permeable substrate: flat (less than 3 degrees) accumulations of sediment, highly permeable substrate dominated by sand, sediments are well saturated so oil penetration is limited, exposure to wave or tidal-current energy is evidenced in ripples or scour marks or sand ridges, width can vary from a few meters to one kilometer, sediments are soft with low trafficability, high infaunal densities.

ESI #8--Sheltered impermeable substrate: sheltered from wave energy and strong tidal currents, substrate of bedrock or rocky rubble, variable in oil permeability, slope greater than 15 degrees with a narrow intertidal zone, high coverage of attached algae and organisms.

ESI #9--Sheltered flat semi-permeable substrate: sheltered from wave energy and strong tidal currents, substrate is flat (less than 3 degrees) and dominated by mud, sediments are water-saturated so permeability is low, width varies from a few meters to one kilometer, sediments are soft with low trafficability, infaunal densities are high.

ESI #10--Vegetated wetlands: marshes and swamps with various types of emergent herbaceous grasses and woody vegetation over flat mud to sand substrate—highly organic mud is common.

**Alaska ShoreZone Coastal Habitat Mapping.** An on-going coastal habitat mapping effort is producing an online database, digital maps, and color aerial imagery and videos of the coastline in the area. This geo-

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referenced data set collected at low tide includes coastal geomorphology and biological habitat for some intertidal and shallow subtidal areas.

Responders have access to several useful tools through the ShoreZone web portal. Low altitude video and high resolution still photos are available with longitude and latitude and presented spatially on base maps (basic maps, topos, and satellite images). Also, habitat maps can be generated online for attributes such as Oil Residency Index, ESI, and sensitive biota (e.g., eelgrass).

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Regional Office hosts the Alaska ShoreZone web portal at: <a href="http://alaskafish eries.noaa.gov/shorezone/">http://alaskafish eries.noaa.gov/shorezone/</a>. The Nature Conservancy, an Alaska ShoreZone partner, also hosts an informative online website which has links to ShoreZone information. It can be accessed at: <a href="http://www.shorezone.org">http://www.shorezone.org</a>.

3. Upland Habitats - At this time, no uplands or wetlands classifications directly related to sensitivity to oil spills has been identified. A general wetlands classification has been developed by the U.S. Fish and Wildlife Service, National Wetlands Inventory, in Anchorage. Considerable mapping of wetlands has been completed, some of which are available in a Geographic Information System database. Updated map data is being placed on the National Wetlands Inventory Internet web site at: <a href="http://wetlands.fws.gov/">http://wetlands.fws.gov/</a>. View a copy of the wetlands status map here: <a href="http://www.asgdc.state.ak.us/maps/cplans/base/wetlands99.pdf">http://www.asgdc.state.ak.us/maps/cplans/base/wetlands99.pdf</a>.

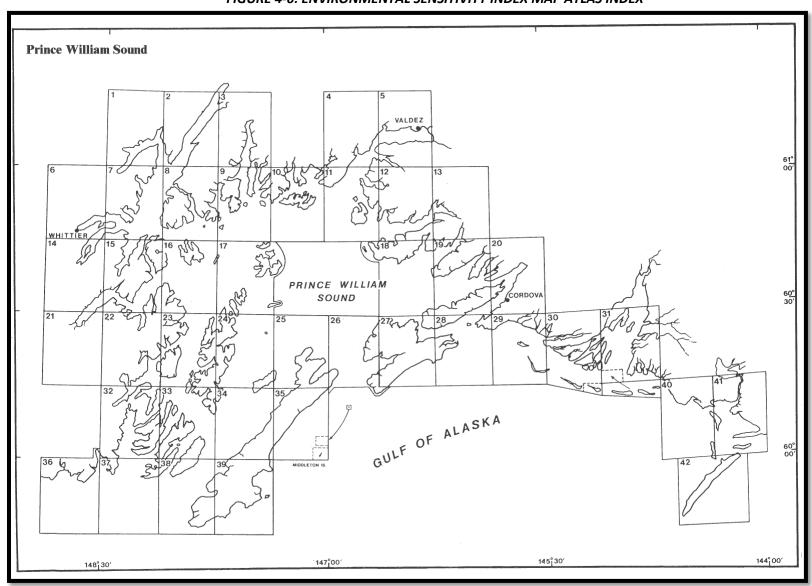
#### **ESI HABITAT RANKING**

ESI	Estuarine	Lacustrine	Riverine
No.	(Marine)	(Lake)	(Large Rivers)
1 A	Exposed rocky cliffs	Exposed rocky cliffs	Exposed rocky banks
1 B	Exposed sea walls	Exposed sea walls	Exposed sea walls
2	Exposed wave-cut platforms	Shelving bedrock shores	Rocky shoals; bedrock ledges
3	Fine- to medium- grained sand beaches	Eroding scarps in unconsolidated sediments	Exposed, eroding banks in unconsolidated sediments
4	Coarse-grained sand beaches	Sand beaches	Sandy bars and gently sloping banks
5	Mixed sand and gravel beaches	Mixed sand and gravel beaches	Mixed sand and gravel bars and gently sloping banks
6 A	Gravel beaches	Gravel beaches	Gravel bars and gently sloping banks
6 B	Riprap	Riprap	Riprap
7	Exposed tidal flats	Exposed flats	Not present
8 A	Sheltered rocky shores	Sheltered scarps in bedrock	Vegetated, steeply sloping bluffs
8 B	Sheltered sea walls	Sheltered sea walls	Sheltered sea walls
9	Sheltered tidal flats	Sheltered vegetated low banks	Vegetated low banks
10 A	Saltwater marshes		
10 B		Freshwater marshes	Freshwater marshes
10 C		Freshwater swamps	Freshwater swamps

<sup>&</sup>quot;Environmental Sensitivity Index Guidelines" (October 1995) NOAA Technical Memorandum NOS ORCA 92

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FIGURE 4-6: ENVIRONMENTAL SENSITIVITY INDEX MAP ATLAS INDEX



#### 4640.4.2 - Biological Resources

## 1. Threatened and Endangered Species

Federally listed threatened and endangered species are protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). If response strategies are proposed in locations where migratory birds and/or marine mammals listed as threatened and/or endangered are (or may be) present, the Federal On-Scene Coordinator will need to immediately consult with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (as appropriate) regarding the proposed strategies, in accordance with the Endangered Species Act Memorandum of Understanding. The northern right whale, humpback whale, blue whale, and short-tailed albatross are also on the State of Alaska's endangered species list. The following species<sup>a</sup> and critical habitat occur in this area:

Endangered Species Act of 1973 Protected Species and Critical Habitat									
Listed species	Stock	Latin Name	Status						
Blue whale*		Balaenoptera musculus	Endangered						
Bowhead whale*		Balaena mysticetus	Endangered						
Fin whale*		Balaenoptera physalus	Endangered						
Humpback whale*		Megaptera novaeangliae	Endangered						
North Pacific right whale*		Eubalaena japonica	Endangered						
North Pacific gray whale*	Western population	Eschrichitus robustus	Endangered						
Sei whale*		Balaenoptera borealis	Endangered						
Sperm whale*		Physeter macrocephalus	Endangered						
Steller sea lion*	Western population	Eumetopias jubatus	Endangered						
Leatherback sea turtle*		Dermochelys coriacea	Endangered						
Short-tailed albatross**		Diomedea albatrus	Endangered						
Steller's eider**		Polysticta stelleri	Threatened						
<b>Designated Critical I</b>	Habitat								
Species Group	General Reference	e Area							
Whales*	No critical habitat has been designated for the above referenced whales in PWS.								
Steller's eider**	No critical habitat birds in PWS.	No critical habitat has been designated for the above referenced birds in PWS.							
INTELLER SEA HON*	Most of PWS and a Part 226.12)	around Middleton Island and Cape	St. Elias (50 CFR						

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In its definition of species, the Endangered Species Act of 1973, as amended, includes the traditional biological species concept of the biological sciences and "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature" (16 U.S.C. 1532). The National Marine Fisheries Service uses the term evolutionarily significant unit as synonymous with distinct population segment and lists Pacific salmon accordingly. For the purposes of section 7 consultations, these are all "species."

Pacific Salmon*	No critical habitat has been designated for salmon species in Alaskan
Pacific Saimon	waters.

<sup>\*</sup> Managed by the National Marine Fisheries Service

The Alaskan bald and golden eagles, though not on the endangered species list, are fully protected (including their nests and nest trees) under the Bald Eagle Protection Act of 1940 and the Migratory Bird Treaty Act. Spill response activities that could affect these species should be coordinated with the U.S. Fish and Wildlife Service.

While the National Marine Fisheries Service has determined the Eastern North Pacific gray whale is no longer a threatened or endangered species, monitoring of the species has continued since the 1994 delisting. In addition, the critically endangered Western Pacific gray whale may be present offshore of Prince William Sound.

The eastern distinct population segment (DPS) of Steller sea lions was removed from the List of Endangered and Threatened Wildlife by NOAA in 2013. This population overlaps with the western DPS in the Prince William Sound Region; however, this area is west of the longitudinal separation of the two populations, and is considered habitat for the western DPS of Steller sea lions, which is listed as endangered.

All marine mammals, whether or not they are on the endangered species list, are protected by the Marine Mammal Protection Act of 1972. Any spill response activities, which could affect marine mammals, should be coordinated with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service, as appropriate.

#### For updated information on the internet:

U.S. Fish and Wildlife Service National Threatened and Endangered Species website: http://endangered.fws.gov/

U.S. Fish and Wildlife Service Regional Threatened and Endangered Species website: http://alaska.fws.gov/fisheries/endangered/index.htm

The National Marine Fisheries Service Regional Threatened and Endangered Species website: http://www.fakr.noaa.gov/protectedresources/esa/ak specieslst.pdf

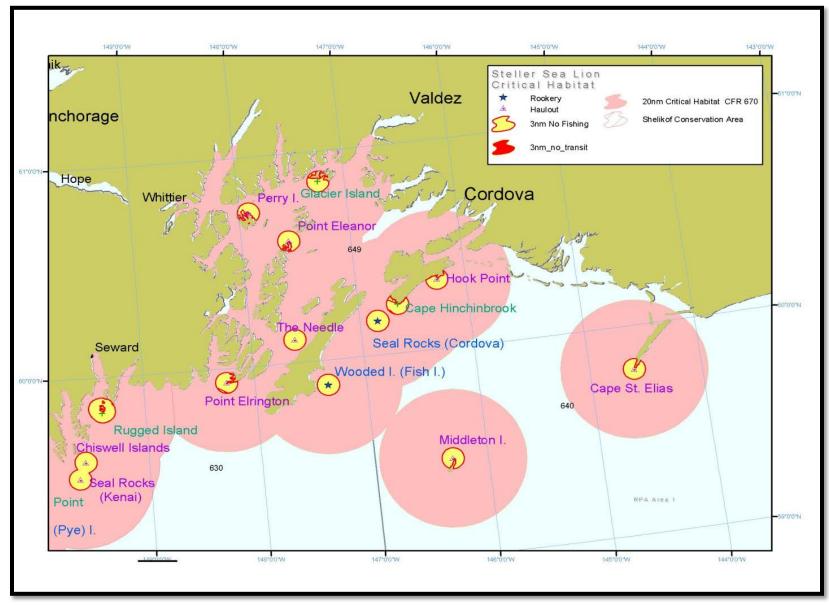
Alaska Department of Fish and Game Threatened and Endangered Species website: http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akendangered

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<sup>\*\*</sup> Managed by the U.S. Fish and Wildlife Service

FIGURE 4-7: STELLAR SEA LION CRITICAL HABITAT IN PRINCE WILLIAM SOUND

(Source: National Marine Fisheries Service)



#### 2. Fish and Wildlife

<u>Fish</u>: The Prince William Sound area is rich in biological resources. In addition to supporting a sizeable commercial fishing industry, the area is utilized by subsistence users, hunters and sport fishermen. Many islands in the Sound provide habitat for freshwater fish and provide anadromous spawning habitat. The National Marine Fisheries Service has classified all waters of Prince William Sound as essential fish habitat for: walleye pollock, Pacific cod, yellowfin sole, rock sole, flathead sole, arrowtooth flounder, sablefish, sculpin spp., pink salmon, chum salmon, Chinook salmon, and sockeye salmon. For more information on fisheries and to access fisheries data, please see the Alaska Department of Fish & Game's e-library website at: <a href="http://www.adfg.alaska.gov/index.cfm?adfg=library.main.">http://www.adfg.alaska.gov/index.cfm?adfg=library.main.</a>

#### Fin Fish

The waters of the Prince William Sound area are among the most productive in the world. Major freshwater systems of the region include the Copper River, Resurrection River, Bering River, and Eshamy River. Many of the nearshore waters along the Tatitlek Narrows have been designated as sensitive biological resources for fish. Most of the flowing waters and many of the lakes support populations of anadromous or resident species of fish. Lagoons and estuarine areas are important rearing and overwintering areas for anadromous fish. River deltas are particularly important areas for fish throughout the year. Shallow lakes, oxbows, and seasonally flooded wetlands connected to streams or rivers may support fish during the summer but may freeze to the bottom in winter. If the depth of the water exceeds that of the seasonal ice thickness, fish may be found in a particular waterbody year-round. Deep lakes and rivers, and spring-fed stream systems serve as overwintering areas for fish in the Prince William Sound area.

<u>Arctic Grayling</u> spawn in May and June, typically in unsilted rapid-runoff streams and lake inlets and outlets; fry emerge by early June. Grayling commonly overwinter in deep, large rivers or lakes, or in smaller streams if adequate water quality and flow exists throughout the winter. No indigenous stocks of Arctic grayling occur in the Prince William Sound Management Area. ADF&G stocked 8 lakes with Arctic grayling along the Copper River Highway between Cordova and the Million Dollar Bridge since 1984 and in Thompson Lake near Valdez. Thompson Lake is the only site in Prince William Sound that Arctic grayling are presently being stocked.

Arctic Char/Dolly Varden are widely distributed throughout the Prince William Sound area. Fish return to freshwater spawning and overwintering areas from July through December. Char spawn from August through November; fry emerge in April and May. Dolly Varden spawn from September to October and may live to 18 years. Most Dolly Varden live under 10 years. Char typically overwinter in lakes. The Robe River drainage is the assumed main overwintering site for various spawning stocks in the Valdez Arm. Migration of anadromous char from overwintering areas to marine feeding areas occurs from April to June. Important areas for Arctic char/Dolly Varden include Montague Island, Round Island, Controller Bay, Knight Island, Martin River Slough, Jackpot Bay, Cochrane Bay, Hawkins Island, Long Bay, Bering River and Resurrection River drainage. Montague and Knight Islands support rearing Dolly Varden. Eyak River provides important habitat for Dolly Varden.

Rainbow/Steelhead Trout occur in the Prince William Sound area. Rainbow trout (resident) are found in Copper River, on Round Island, and in Robe Lake. Steelhead (anadromous) are found in the Copper River Delta. Rainbow trout generally spawn during May and June, and fry emerge a few weeks to four months later. Steelhead spawn between mid-April to June, and fry emerge during mid summer. Steelhead do not necessarily die after spawning. Many of these salmonids will move slowly back to the ocean where, after at least one year, they may return to freshwater to spawn again.

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<u>Eulachon</u> return in small numbers to Prince William Sound glacial streams to spawn. Eulachon are broadcast spawners, spawning in April or May. Females lay between 17,000-60,000 eggs. Most die after spawning. Spawning eulachon provide a feeding feast for bears, eagles, killer whales, beluga whales, seals, sea lions, gulls, and humans. Fish are used by the Tinglet for oil and food. There are less than 6 eulachon spawning systems in Prince William Sound Management Area (PWSMA), including the Copper and Martin rivers, and Alaganik and Ibeck sloughs.

Cutthroat Trout inhabit coastal areas from Prince William Sound south. PWS is the most northern and western extreme range for this species, making the Sound population small in size and distribution. They spawn in late April to early June, females producing from 750-1,200 eggs per pound of body weight. Many occur in streams, lakes, bogs, ponds and at sea. Life span varies depending on area, with lake residents living to 19 years, stream residents to 5 years, and sea-run to 10 years. Cutthroat trout are very sensitive to environmental change, pollution and introduced species. Rainbow trout often hybridize with cutthroat trout when they occur in the same area. Hawkins Island has an important spawning stream for cutthroat trout. Jackpot Bay supports several species of anadromous fish including cutthroat trout, Dolly Varden, and sockeye salmon. Controller Bay supports cutthroat trout. The highest population of cutthroat trout in western Prince William Sound occurs in the Eshamy Bay system. Cutthroat trout rearing occurs on Knight Island. Eshamy Creek drainage and Green Island Creek were closed by emergency order No. 2-CT-6-02-92 in 1992 during the spawning season. A similar order was released in 1993. The Natural Resources Damage Assessment program collected information following the Exxon Valdez oil spill, which indicated that cutthroat trout in the oil-impacted area had reduced survival and growth.

<u>Chinook, coho, sockeye, pink, and chum salmon</u> occur within the Prince William Sound area. Adult salmon are present in freshwater from mid-March through early October, depending on the species of salmon and the stream system. Salmon eggs incubate in the stream gravels over the winter; fry emerge from stream gravels from mid-March through early June. Chinook, sockeye, and coho fry remain in fresh water from one to four years before migrating to sea. Chum and pink salmon fry migrate to the sea shortly after emerging from the gravel. In 1990, Alaska outlawed the farming of salmon to protect native stocks from hybridization, pollution, disease and competition for food. Attachment two of this document provides average salmon escapement or average peak index counts for salmon streams in the Prince William Sound area.

<u>Pink Salmon</u> occur in over 200 streams in the Prince William Sound area that produce natural runs of pink salmon. Four hatcheries produce pink salmon for the PWSMA. Important wild pink salmon spawning streams are located in the Port Gravina area, while Sahlin Lagoon provides rearing habitat. Pink salmon utilize Montague Island. Nellie Martin River and Knight Island are major spawning areas for pink salmon. Pink salmon spawn in the intertidal areas of most anadromous streams in the Sound, including the Cape Suckling area. The Copper River drainage supports pink salmon.

<u>Sockeye Salmon</u>-Sockeye salmon are found in select streams in the Prince William Sound area. In systems with lakes, juveniles usually spend one to three years in fresh water before migrating to the ocean in the spring as smolts. Sockeye salmon return to their natal stream to spawn after spending one to four years in the ocean. In mid-July to early October, sockeye run to Eshamy Lake to spawn, and they are present in the Eshamy Bay system in large numbers. Sockeye spawn in the Campbell River and associated systems leading into Controller Bay. Knight Island provides spawning and rearing habitat for sockeye salmon. Jackpot Bay also contains sockeye salmon. While in fresh water, juvenile sockeye salmon feed mainly upon zooplankton (such as ostracods, cladocerans, and copepods), benthic amphipods, and insects.

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Sockeye salmon continue to feed upon zooplankton (such as copepods, euphausids, ostracods, and crustacean larvae) in the ocean, but also prey upon larval and small adult fishes (such as sand lance), and occasionally squid. Aboriginal people considered sockeye salmon to be an important food source and either ate them fresh or dried them for winter use. Sockeye salmon support one of the most important commercial fisheries on the Pacific coast of North America, are increasingly sought after in recreational fisheries, and remain an important mainstay of many subsistence users. The Copper River is world renowned for the production of Copper River sockeye (red) salmon and this river is a major commercial fishery. Historically the major recreational fisheries in PWS for sockeye have occurred at Eshamy, Cordova, Valdez, and Coghill. Sockeye fisheries at Coghill and Eshamy have rebuilding from several years of poor returns.

Chum salmon are present through PWS and fry feed on small insects in streams and estuaries before forming into schools in salt water where their diet usually consists of zooplankton. Chum do not have a period of freshwater residence after emergence of the fry as do chinook, coho, and sockeye salmon. They are similar to pink salmon in this respect, except that chum fry do not move out into the ocean in the spring as quickly as pink fry. Significant chum salmon systems include Montague Island, Nellie Martin River, and Controller Bay. Sport fishers generally capture chum salmon incidental to fishing for other Pacific salmon in either fresh or salt water. Statewide sport harvest usually totals fewer than 25,000 chums. After entering fresh water, chums are most often prepared as a smoked product. In the last few years an average of 11 million chum salmon, worth over \$32 million, have been caught in Alaska. Most chum are caught by purse seines and drift gillnets, but fishwheels and set gillnets harvest a portion of the catch. In many areas they have been harvested incidental to the catch of pink salmon. The development of markets for fresh and frozen chum in Japan and northern Europe has increased their demand, especially in the last decade. The Alaska Department of Fish and Game has built several hatcheries primarily for chum salmon products. In recent years the chum slamon returning to Wally Norenberg hatchery on Esther Island have been targeted by sport anglers.

Chinook Salmon is Alaska's state fish and is one of the most important sport and commercial fish native to the Pacific coast of North America. It is the largest of all Pacific salmon, with weights of individual fish commonly exceeding 30 pounds. Unlike other salmon species, Chinook salmon rear in inshore marine waters and are, therefore, available to commercial and sport fishers all year. This also makes them vulnerable to inshore marine pollutants year round. Juvenile Chinook in fresh water feed on plankton, then later eat insects. In the ocean, they eat a variety of organisms including herring, pilchard, sandlance, squid, and crustaceans. Catches of Chinook salmon in Southeast Alaska are regulated by quotas set under the Pacific Salmon Treaty. Major waterways in the Copper River area contributing to the fisheries include Martin River, Eyak River, Mountain Slough, and Strawberry Channel. Areas closed to sport Chinook fishing include: Eccles Creek, Eyak Lake, Clear Creek upriver of the Carbon Mountain Bridge, and Hartney Creek (all near Cordova); all freshwater drainages of Valdez Arm except for a portion of Robe River and Solomon Gulch Creek; and all waters within 300 feet of a weir or fish ladder (Hoffman and Miller 2000). There is a major commercial and sport fishery for Chinook salmon in the Copper River Valley.

<u>Coho Salmon</u> are extremely adaptable and occur in nearly all accessible bodies of fresh water-from large transboundary watersheds to small tributaries throughout PWS. Coho salmon enter spawning streams from July to November, usually during periods of high runoff. Run timing has evolved to reflect the requirements of specific stocks. The coho salmon is a premier sport fish and is taken in fresh and salt water from July to September. The streams in the Cape Suckling and Copper River Delta areas contain coho salmon. Nellie Martin River is a major spawning area for coho. Spawning and rearing of coho occurs on Knight Island, and in the Campbell River and associated systems leading into Controller Bay. Areas

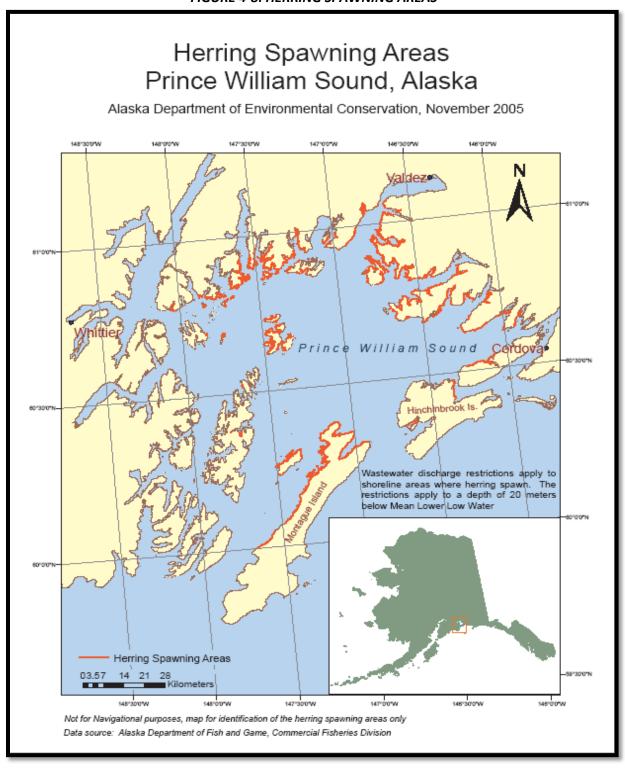
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closed to sport coho fishing include: Eccles Creek, Eyak Lake, Clear Creek upriver of the Carbon Mountain Bridge, and Hartney Creek (all near Cordova); all freshwater drainages of Valdez Arm except for a portion of Robe River and Solomon Gulch Creek; and all waters within 300 feet of a weir or fish ladder.

Pacific Herring are critically important in the PWS food web as many seabirds, fish and marine mammals rely on them as prey. Wide distribution of herring occurs from 50 to 100 meter depths and they aggregate in large schools for spawning in April in nearshore subtidal and intertidal areas. Herring biomass has ranged from 20,000 to well over 100,000 tons in the Sound. Spawning of Pacific herring occurs from late April to mid-June. A major spawning area for herring extends from Stockdale Harbor around to Rocky Bay. Spawning also occurs in Sheep Bay, north side of Story Island, west side of Naked Island, and Hells Hole in Port Gravina. Spawning occurs in intertidal and subtidal areas. Kelp or eelgrass is typically the preferred spawning substrates. Rearing juvenile herring are found at the mouth of St. Matthew's Bay in Sheep and Simpson bays and at Knowles Head. At Jackpot and Whale bays, major juvenile herring nurseries occur. A rich supply of nutrients at the Hinchinbrook Entrance supports spawning in May. The Tatitlek Narrows support a major Pacific herring spawning area in the southern half of the Narrows, down into the mouth of Port Fidalgo. Pacific herring spawn on the north side of Fairmount Island. Overwintering grounds link Montague and Green Islands and are also found in Zaikof Bay and off Montague Point. Port Gravina holds a major over-wintering population.

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FIGURE 4-8: HERRING SPAWNING AREAS



<u>Capelin</u> are infrequently harvested, but are nevertheless important forage fish for higher trophic predators such as seabirds and marine mammals because of their high oil content. Capelin spawn on sandy to small gravel beaches. They typically spawn from May through July, but they are inconsistent in

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timing, location, and numbers from year to year. Capelin are infrequently repeat spawners. Much of their life history in the Prince William Sound area is unknown, but they are known to spawn at the Hinchinbrook Entrance and their larvae is known to increase in Chenega Bay in August.

<u>Pacific Halibut</u> are found throughout the PWS area and are important for commercial, sport, and subsistence fishing. They spawn in deep water from 600 to 1,500 feet from November to January. The fertilized eggs hatch in about 15 days. Older halibut spend winters in the deep water along the continental shelf. In summer, adult halibut move to shallow coastal waters with depths from 90 to 900 feet. Halibut are able to eat a large variety of fishes (cod, turbot, pollock) plus some invertebrates such as crab and shrimp. Sometimes halibut leave the ocean bottom to feed on pelagic fish such as sand lance and herring. Halibut and their fisheries are managed under an international treaty, the Halibut Convention of 1982 and the 1979 Protocol. The International Pacific Halibut Commission was formed to assure the optimal sustained yield of North Pacific halibut resources. In waters of the United States, halibut are governed under the Magnuson-Stevens Fishery Conservation and Management Act and the responsibility for allocation of the catch quota among fisheries falls to the North Pacific Fishery Management Council.

<u>Lingcod</u> typically inhabit nearshore rocky reefs from 30 to 330 feet in depth. Lingcod is an increasingly popular recreational fish.

<u>Groundfish</u>. The following species are found throughout Prince William Sound: arrowtooth flounder, flathead sole, Pacific cod, rock sole, sculpin, walleye pollock, and yellowfin sole. Pollock spawn in Hinchinbrook Entrance in April and May and their larvae may be susceptible to oil contamination at that time. Cod spawn in late winter or early spring and due to their abundance, they are extremely important to the ocean's food web. Yellowfin sole juveniles stay in the nearshore area for 3 to 5 years.

Other Forage Fish. Numerous species of fish inhabit the nearshore areas and these populations are often dominated by sand lance and rainbow smelt which might comprise 40% of the nearshore fish by number. Sand lance is one of the most important forage fish in the Prince William Sound area. Rainbow smelt is also an important subsistence food where communities harvest up to several thousand pounds per community.

## **SHELLFISH**

<u>Dungeness Crabs</u> are found from the intertidal region to a depth of 230 m. Dungeness crabs are most common on sand or muddy-sand bottoms in the subtidal region, and are often found in or near eelgrass beds. However, they can also be found on a number of other substrata including various mixtures of silt, sand, pebble, cobble, and shell. Juvenile Dungeness crabs are found in similar habitats to adults, but they generally occupy shallower depths than adults. Juvenile crabs can be very abundant in the intertidal zone, but also occur in shallow subtidal areas. Survival of young crabs is greatest in habitats such as intertidal zones and eelgrass beds, where they can gain refuge from predators.

<u>King Crab</u>. Three species of king crab are located in PWS: red, blue, and brown. Red king crab larvae generally exhibit a diel movement being most abundant in the upper water column during the day and deeper at night. Young of the year crab occur at depths of 50 m or less. They are solitary and need high relief habitat or coarse substrate such as boulders, cobble, shell hash, and living substrates such as bryozoans and stalked ascidians. Between the ages of two and four years, there is a decreasing reliance on habitat and a tendency for the crab to form pods consisting of thousands of crabs. Podding generally continues until four years of age (about 6.5 cm), when the crab move to deeper water and join adults in the spring migration to shallow water for spawning. Adult red king crabs occur to a depth of 365 m;

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preferred habitat for reproduction is water less than 90 m. Red king crabs are sparsely distributed throughout Prince William Sound with historic concentrations occurring in eastern Prince William Sound and Hinchinbrook Entrance. Blue king crabs are located in the Port Wells-Harriman Fjord area with small isolated populations associated with glacial fjords in western Prince William Sound. Brown king crabs occur at depths of 300-800 meters and are found in central and western PWS. They move into waters of less than 10 fathoms from about mid-February to June 1 to mate and molt.

<u>Tanner Crab</u> larvae are strong swimmers and perform diel vertical migrations in the water column (down at night). They usually stay near the depth of the chlorophyll maximum during the day. The length of time larvae take to develop is unknown, although it has been estimated at only 12 to 14 days. After settling to the bottom, Tanner crabs are widely distributed at depths up to 473 m. Females are known to form high density mating aggregations consisting of hundreds of crabs per mound. The mounds likely form in the same general location each year, but the location of the mounds is largely undocumented. Important rearing habitat occurs around the north end of Montague and the north end of Green Island as well as south between Montague and Green islands.

Weathervane scallops occur in the PWS area. Weathervane scallops are found on sand, gravel, and rock bottoms from 50-200 m. Generally, weathervane scallops are sexually mature at age 3 or 4 and are of commercially harvestable size at 6 to 8 years. Scallops are found in beds (areas of abundant numbers), and are dioecious, having separate sexes. Spawning occurs in June and July where the spermatozoa and ova are released into the water. In approximately one month hatching occurs and the larvae drift with the tides and currents. After two or three weeks the larvae will have gained shell weight, settled to the bottom, and attached to seaweed. Within four to eight weeks after settling, the juvenile will develop the ability to swim for locomotion. At this time, the juvenile scallop is approximately 3/8 of an inch in diameter and will take on the adult form. Scallops may live to age 18 and they feed by filtering microscopic plankton from the water. They have been commercially harvested throughout Alaska on a sporadic basis due to overharvesting scallop beds.

Shrimp. Pandalid shrimp (northern pink shrimp, humpy/flexed shrimp, spot shrimp/prawn, coonstripe shrimp, and sidestripe/giant red shrimp) are distributed throughout most major bays and certain nearshore and offshore areas in PWS. Spots and coonstripes are generally associated with rock piles, coral, and debris-covered bottoms, whereas pinks, sidestripes, and humpies typically occur over muddy bottom. Pink shrimp occur over the widest depth range (10-800 fathoms) while humpies and coonstripes usually inhabit shallower waters (3-200 fathoms). Spot shrimp seem to be caught in the greatest concentrations around 60 fathoms, but range from 2 to 250 fathoms. Sidestripes are typically found from 25 to 350 fathoms, but most concentrations occur in waters deeper than 40 fathoms. Most shrimp migrate seasonally from deep to shallow waters. Pandalid shrimp will eat a wide variety of items such as worms, diatoms, detritus (dead organic material), algae, and various invertebrates. Shrimp are an important part of the ocean food chain and are often the diet of large predator fish such as Pacific cod, walleye pollock, flounders, and salmon. Fisheries for shrimp have occurred in the Prince William Sound area with limited harvest occurring in western PWS. Pink shrimp generally comprise more than 80 percent of trawl landings. Spot shrimp are the primary species caught in Prince William Sound and the waters of Southeast Alaska. There are both a sport fishery and a commercial fishery for shrimp in PWS. During the 1999 Board of Fisheries Meeting, the Board reduced the number of pots allowed to no more than 5 pots per person with a maximum of 5 per vessel and defined the season from April 15 to September 15 to help reduce harvest of egg-bearing females. Since 2001, a permit is required to harvest shrimp in Prince William Sound.

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Razor clams live in surf-swept and somewhat protected sand beaches of the open ocean throughout PWS. They are found from approximately 4 feet above the mean low water level down to depths of 30 fathoms. Razor clams subsist on minute plants and animal life (plankton) filtered from the surrounding seawater. Razor clam concentrations are found in the Copper River Delta/Controller Bay area. Commercial harvest of razor clams in Prince William Sound has occurred since 1916 in the Cordova area. Annual production levels have fluctuated greatly reaching approximately 600,000 pounds in Cordova. The 1964 earthquake adversely affected razor clam populations in the Cordova area.

<u>Pacific Little Neck Clams</u> are commercially harvested throughout Prince William Sound.

<u>Blue mussels</u> are found throughout the Prince William Sound area and are densely packed around Port Gavina, LaTouche Island's Sleepy Bay, and Evans Island's Shelter Bay.

## Essential Fish Habitat (EFH)

In 1996, Congress added new habitat provisions to the Magnuson-Stevens Fishery Conservation and Management Act, the federal law that governs U.S. marine fisheries management. Under the Magnuson-Stevens Act, each fishery management plan must describe and identify EFH, and identify other actions to encourage the conservation and enhancement of EFH. Federal agencies must consult with the National Marine Fisheries Service on any action they authorize, fund, or undertake that may adversely affect EFH, and the National Marine Fisheries Service must provide conservation recommendations to the federal and state agencies regarding any action that would adversely affect EFH. Reference information for EFH in the area, as identified by the National Marine Fisheries Service, can be found on their interactive mapping website at: http://www.fakr.noaa.gov/maps/.

An additional EFH resource is their interactive mapping website: <a href="http://www.habitat.noaa.gov/protection/efh/habitatmapper.html">http://www.habitat.noaa.gov/protection/efh/habitatmapper.html</a>.

## <u>Birds</u>

#### Important Bird Habitats/Communities

Important Bird Area (IBA). The marine waters of Prince William Sound have been designated as a globally significant Important Bird Area by Audubon, as the U.S. Partner for BirdLife International. Important Bird Areas, or IBAs, are sites that provide essential habitat for one or more species of birds, including sites for breeding, wintering, and/or migrating birds. PWS is an IBA for the following species: Kittlitz's murrelet, pelagic cormorant, black scoter, marbled murrelet, Barrow's goldeneye, and harlequin duck.

The Audubon Alaska's <u>Marine Important Bird Areas in Alaska</u> report can be downloaded at: <a href="http://ak.audubon.org/sites/default/files/documents/marine">http://ak.audubon.org/sites/default/files/documents/marine</a> ibas report final sep 2012.pdf.

More than 220 species of birds are found in the Prince William Sound region. Large numbers of waterfowl, seabirds, and shorebirds are found in Prince William Sound and the Copper River Delta during spring and fall migrations, with populations peaking during April and May. During spring bird migrations, some species concentrate in flocks of thousands, others in flocks of hundreds of thousands. Many birds also breed in the region during the summer and overwinter in sheltered areas.

The more common water bird species for the region include common loon, yellow-billed loon, redthroated loon, double-crested cormorant, pelagic cormorant, great blue heron, Canada goose, greenwinged teal, Barrow's goldeneye, northern fulmar, harlequin duck, long-tailed duck, white-winged scoter, surf scoter, black scoter, common merganser, red-breasted merganser, black-legged kittiwake, gulls,

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common murre, thick-billed murre, pigeon guillemot, marbled murrelet, Kittlitz's murrelet, ancient murrelet, horned puffin, and tufted puffin. A complete list of birds vulnerable to oiling impacts in the PWS area can be found in the Wildlife Protection Guidelines, Appendix 2 Species of Concern by Area: Migratory Birds.

<u>Surfbirds.</u> Tens of thousands of surfbirds are attracted to the herring roe in Rocky Bay from early March to mid-April. North Montague Island is also a migratory stopover for post-breeding surfbirds, rock sandpiper, and black turnstones numbering in the thousands. Seventy percent of the world's surfbird populations use Montague Island as their staging area as they prepare to migrate to inland alpine tundra.

<u>Waterfowl</u>. One third of the southwestern Sound harlequin duck population is found along Green and Channel islands. The eastern Sound population of harlequin duck is concentrated in Olsen Bay, Hell's Hole, and Sheep Bay. Harlequin ducks nest around Constantine Harbor. Wintering areas for harlequin duck and scoters include Harriman Fjord and Barry Arm. Eshamy Bay supports harlequin ducks wintering in the nearshore marine zone and they nest and brood on fast moving streams in the area. Harlequin ducks molt and winter in the Tatitlek Narrows. An important waterfowl migratory stopover has been designated on Patton Bay. Both Heather and Columbia bays have been identified as an important resource area for waterfowl.

Seabirds. The North Pacific Pelagic Seabird Database (NPPSD) provides comprehensive geographic data on the pelagic distribution of seabirds in Alaska and the North Pacific. The current version of the NPPSD contains 335 unique taxa and include 4-letter codes, common names, ITIS taxonomic serial number, and NODC taxonomic code for marine birds and mammals observed on surveys in the NPPSD dataset. This list is provided to further the goal of standardizing pelagic seabird data. Researchers are encouraged to use this list for marine bird and mammal surveys in the North Pacific. This dataset is managed by the USGS Alaska Science Center and can be found at:http://alaska.usgs.gov/science/biology/nppsd/index.php. See the following link for regional summary Seabird Population Map. http://www.asgdc.state.ak.us/maps/cplans/pws/pws3seabird.pdf.

The North Pacific Seabird Data Portal provides access to the North Pacific Seabird Colony Register, an automated database that contains the distribution of breeding seabirds and the relative size of all the colonies in Alaska. Download requests can be submitted online and colony data can be downloaded directly to a computer. The downloaded colony data provides information on a colony's location, species composition, and estimated numbers of breeding seabirds at that colony. The North Pacific Seabird Colony Register is maintained by the U.S. Fish and Wildlife Service, Division of Migratory Bird Management, in Anchorage. For updated information see the internet at: <a href="http://axiom.seabirds.net/maps/js/seabirds.php?app=north">http://axiom.seabirds.net/maps/js/seabirds.php?app=north</a> pacific&v=rand.

In the southwest portion of Prince William Sound, almost two-thirds of the pigeon guillemot population resides with colonies on Evans Island. Tufted puffins have a large colony at Point Elrington and horned puffin, Arctic tern, black-legged kittiwake, pelagic and red-faced cormorant, common murre, and glaucous-winged gull also have colonies at Point Elrington. Glaucous-winged gulls are attracted to the herring roe in Rocky Bay in large numbers. The highest nesting densities of pigeon guillemot (1/4 of colonies nesting) in the Sound occur on Naked Island. One of the primary locations for marbled murrelet in the Sound is on Naked Island. Large congregations of seabirds including double-breasted and pelagic cormorant, glaucous-winged gull, pigeon guillemot, and tufted and horned puffin occur on the west side of Hinchinbrook Island in May.

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Kittlitz's murrelet numbers have dropped dramatically over the last decade throughout Prince William Sound. The Kittlitz's murrelet population, found almost exclusively in Alaska, feeds and nests throughout PWS, but primarily occurs in glaciated fjords. Fjords with high concentrations are Harriman and College fjords and Glacier and Heather bays, with smaller numbers in Blackstone Bay and Port Nellie Juan. Marbled murrelets also nest and feed throughout PWS, particularly in areas with large old-growth trees. A smaller portion of the PWS marbled murrelet population nest on the ground in cliff crevices. Large numbers of tufted puffins, horned puffins and pigeon guillemot have been counted in this area. Marbled murrelets are known to nest at the north end of Green Island and there is a high density in foraging areas near Needle and Seal islands.

Glaucous-winged gull, mew gull, black-legged kittiwake, and Arctic tern occur and breed in PWS. Skilled birdwatchers can also spot the Aleutian tern and the Caspian tern. Parasitic jaegers often pursue gulls, terns, and kittiwakes making them disgorge their catch.

Every June, black-legged kittiwake are found at Knowles Head. Boswell Rocks and Pinnacle Rocks host major kittiwake colonies. There are documented seabird colonies in 12 areas of Harriman Fjord and Barry Arm. Species within the colonies include pigeon guillemot, black-legged kittiwake, black oystercatcher, Arctic tern, and mew and glaucous-winged gull. Arctic terns and glaucous-winged gulls are present at Unakwik Reef. Arctic tern and glaucous-winged gulls breed on Danger Island. Porpoise Rocks contain large colonies of black-legged kittiwakes as well as common murre and tufted puffin and smaller colonies of glaucous-winged gull and horned puffin. Arctic tern, tufted puffin, and pigeon guillemot all nest around Constantine Harbor.

Areas identified as important for seabirds include Surprise Inlet, Patton Bay, and Serpentine Cove. The major seabird species on Patton Bay in descending order of abundance: tufted puffin, fork-tailed storm-petrel, black-legged kittiwake, Leach's storm petrel, glaucous—winged gull, three species of cormorant, pigeon guillemot, common murre, parakeet auklet, and horned puffin.

Shorebirds-The Sound's shorelines provide a varied assortment of invertebrates for shorebirds to feed on. Common shorebirds include the black oystercatcher, black turnstone, fork-tailed storm-petrel, surfbird, semipalmated plover, greater yellowlegs, spotted sandpiper, wandering tattler, common snipe, and least sandpiper. Black turnstones are attracted to the herring roe in Rocky Bay. More information can be found in Appendix 5 of the Alaska Shorebird Conservation Plan (2008) which identifies important areas for PWS. A copy of the plan can be found at: http://www.fws.gov/alaska/mbsp/mbm/shorebirds/plans.htm.

Black oystercatchers with their brilliant 3-inch long bills, bright orange eyes, and pale pink legs are common around Growler Island. Biologists estimate the world population at a mere 10,000 of which about 1,000 may live in Prince William Sound, occupying gradually sloping rocky spits left by the Pleistocene glaciers. Here, the black oystercatchers slowly stalk the tides in and out feeding on blue mussels and other invertebrates while nearby their young are hidden in the tall beach grasses from predators like bald eagles, ravens, and river otters. Black oystercatchers feed on urchins, crabs, and mussels in the Unakwik area. High densities of breeding black oystercatchers occur on Green, Little Green, and Channel islands and hundreds of black oystercatchers over-winter on Green Island, Stockdale Harbor, and Port Chalmers. Two Moon Bay in Port Fidalgo, Bligh Island, and Sheep Bay are considered prime habitat for oystercatchers. Black oystercatchers breed on Danger Island, and the shores of Prince of Wales Passages are considered important habitat. They are known to nest around Constantine Harbor.

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Middleton Island supports about 700 breeding birds. PWS is home to at least 500 breeding black? oystercatchers with the largest concentrations in Harriman Fjord and along the coasts of Montague and Green Islands. The above areas alone comprise between 45-72% of the estimated global population. PWS supports black? oystercatchers in winter, principally in Constantine Harbor on Hinchinbrook Island, and around Green Island east to the northern portion of Montague Island including Zaikof Bay and Port Chalmers.

Additional information can be found in the Black Oystercatcher Conservation Action Plan (2007). The plan can be found at: <a href="http://www.fws.gov/oregonfwo/Species/Data/BlackOystercatcher/Documents/Black oystercatcher conservation action plan FINAL April07.pdf">http://www.fws.gov/oregonfwo/Species/Data/BlackOystercatcher/Documents/Black oystercatcher conservation action plan FINAL April07.pdf</a>.

Orca Inlet is a staging ground for hundreds of thousands of birds including dunlin, western sandpiper, least sandpiper, and dowitcher as they travel to their breeding grounds. In early May, the tidal flats of the Copper River Delta come alive with the activity of hundreds of thousands of shorebirds. As many as 5 million shorebirds rest and feed on the Copper River Delta during spring migration.

<u>Passerines</u> The upland mosaic of PWS habitats provide nesting, resting, and feeding areas for a variety of birds including the rufous hummingbird, belted kingfisher, violet-green swallow, tree swallow, Steller's jay, black-billed magpie, common raven, northwestern crow, chestnut-backed chickadee, brown creeper, dipper, winter wren, varied thrush, hermit thrush, Swainson's thrush, golden-crowned kinglet, orange-crowned warbler, yellow warbler, Wilson's warbler, pine grosbeak, common redpoll, pine siskin, savannah sparrow, dark-eyed junco, golden-crowned sparrow, fox sparrow, Lincoln's sparrow, and song sparrow. Northwestern crows nest in the spruce copses around Growler Island and feed in the adjacent intertidal zones where one can watch them rolling over or shoving rocks aside with their bills as they seek worms and other invertebrates.

Raptors known to inhabit Prince William Sound include bald eagles and Peale's peregrine falcon. The breeding population of raptors in Prince William Sound is placed at 2,256 out of a North American population estimated between 71,000 - 96,000. Feeding habits of the bald eagle include preying on a wide variety of fish captured during flight. They also feed on carrion. Bald eagles concentrate at freshwater inlets of Eshamy Bay for the spawning sockeye salmon returning. There are approximately 1,638 eagle nests in the Prince William Sound area. Although Alaskan bald and golden eagles are not on the endangered species list, they are fully protected (including their nests and nest trees) under the Bald Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918. Spill response activities that could affect these species should be coordinated with the U.S. Fish and Wildlife Service.

Marine Mammals: Harbor seals, Steller sea lions, sea otters, gray whales, fin whales, sei whales, minke whales, humpback whales, beluga whales, sperm whales, Cuvier's beaked whales, killer whales, Dall's and harbor porpoises, and Pacific white-sided dolphins may be present in the Sound. The Marine Mammal Protection Act of 1972 protects all marine mammals. Any spill response activities, that may affect marine mammals, should be coordinated with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service. Several species of endangered baleen whales migrate through the area and stop to feed in the Sound in the spring and summer. Large Steller sea lion rookeries are located on Seal Rocks and Wooded Island, and major haulouts are found on Pt. Elrington, the Needle, and Cape St. Elias. Several harbor seal haulouts are scattered throughout the Sound and near the mouth of the Copper River. Dense concentrations of marine organisms occur in the Sound, including all five species of Pacific salmon, herring, crab, shrimp, clams, mussels and a variety of intertidal organisms, which attract the populations

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of marine mammals. Local kelp and eelgrass beds are critical components of the marine ecosystem supporting marine mammals.

Killer Whales. Killer whales are commonly observed throughout Prince William Sound and inhabit both near-shore and mid-Strait areas with some preference for the southwestern section of the Sound. Approximately 300 individuals have been documented in this region. Sightings have been made throughout the year with peak occurrence between April and September. Two ecotypes exist in the area—resident pods (i.e., fish eaters) and transient groups (i.e., marine mammals eaters). Specifically, resident killer whales follow and feed on salmon through Montague Strait and into areas within the Sound. Around Green Island transient killer whales have been reported to forage regularly on harbor seals. Transient killer whales also hunt harbor seals in Icy Bay and are known to hunt Dall's porpoises and harbor porpoises in the Knight Island Passage area. Attacks by transient killer whales on sea lions at the Needle have also been reported. Attacks by this top predator on marine mammals can occur throughout the Sound. In addition to the resident killer whale pods of PWS, two resident killer whale pods well-known from Southeast Alaska have been documented in the Sound. Superpods consisting of both PWS residents and Southeast Alaska residents have been observed in both July and August. All life processes occur in this area (e.g., feeding, mating, calving).

<u>Humpback Whales.</u> Prince William Sound represents a major feeding ground for the North Pacific humpback whale with site fidelity by whales documented for this regions. Peak numbers of humpback whales occur in PWS between early summer and late fall. Sightings, however, have been reported every month of the year. This species occupies both near-shore and mid-channel habitats. Humpback whales feed regularly in the Green Island area in July and August in groups of up to 30 individuals. Humpback whales also forage in the Southwest Passage and Knight Island Passage; the Knight Island Passage area represents a major migration corridor for humpbacks during the summer. Feeding bouts have also been reported in the Hinchinbrook Entrance area in July and August.

Gray Whales are not regularly found in Prince William Sound. They are alone among baleen whales in feeding predominantly on infaunal invertebrates. Gray whales are the only baleen whales that are mainly bottom feeders. They apparently feed by lying on their sides and sucking up sediment from the sea floor. The estimated daily consumption of an adult gray whale is about 2,600 pounds (1,200 kg). In the approximately five months spent in Alaska waters, one whale eats about 396,000 pounds (180,000 kg) of amphipod crustaceans. In 1948 the International Convention for the Regulation of Whaling banned all hunting of gray whales except by aboriginal people and by contracting governments when the meat and products are for aboriginal use. Eastern North Pacific gray whales have recovered slightly and their world population is now estimated at about 21,000. Western North Pacific gray whales are thought to number approximately 135 individuals and may rarely occur in the waters offshore of Prince William Sound.

<u>Dall's Porpoise</u>. Dall's porpoise are found throughout Prince William Sound primarily in mid-channel areas and occasionally in near-shore habitats. Year-round occurrence has been documented with seasonal peaks in spring and summer.

<u>Harbor Porpoise</u>. Harbor porpoise are also known to inhabit the waters of Prince William Sound. This species prefers near-shore habitats and has been documented during every month of the year in this region.

<u>Harbor Seals</u> are found in nearshore waters throughout the Prince William Sound region. An estimated 12,300 inhabit the Sound and Copper River Delta (including Kayak Island) during their molting season in

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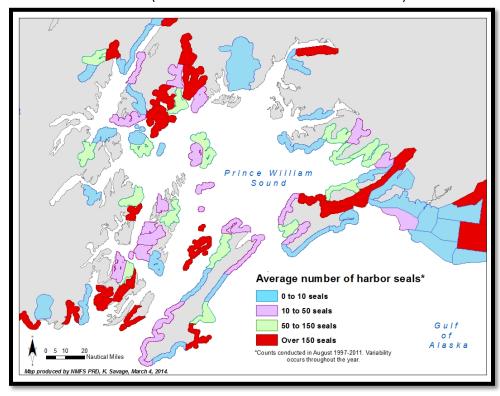
August. Harbor seals tend to aggregate in estuaries and protected waters, where they exhibit strong site fidelity. Habitats used for haulouts include cobble and sand beaches, tidal mud flats, sand bars, offshore rocks and reefs, and ice (frozen heads of bays and on floating ice in fjords). Harbor seals enter lakes and rivers on a seasonal basis most likely in search of prey. Known seal haulouts occur throughout the Prince William Sound area. Major haulout locations include: Fairmount Island, Applegate Rocks, Schooner Rocks, Icy Bay, Port Chalmers, Canoe Passage near Hawkins Island, Iktua Rocks, Danger Island, Agnes Island, Barry Arm, Surprise Inlet, Nuchek, Little Smith Island, Big Smith Island, the northwest tip of Evans Island, the southwestern tip of LaTouche, Olsen Bay, Gravina Rocks, Gravina Island, Stockdale Harbor, Strawberry Channel, Egg Island Channel, islands around the Copper River entrance into the Gulf of Alaska, Rocky Bay, Controller Bay, Kayak Island, Green and Little Green islands, Seal and Channel islands. Other haulouts include: off Lone Island, Story Island, and Perry Island.

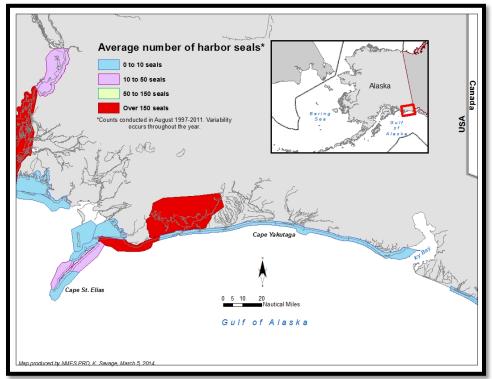
Haulouts are used for pupping, molting, and resting, and may be used year-round; peak haulout use occurs during June through early October. Pupping occurs between late May and early July; most pups are born during the first three weeks of June and require about 3 weeks to wean. Molting occurs from late July to mid-September. Portions of the marine waters of Port Etches have been designated as a sensitive biological resource for harbor seals. Ice calved from tidewater glaciers also provide resting areas for seals, with aggregations mapped near the Harriman, Surprise, Meares, Tiger, Nellie Juan, Yale, Blackstone, Harvard, Barry, and Chenega glaciers. Surprise Inlet and Barry Arm are an important biological resource for seals. Columbia Bay has one of the highest harbor seal densities in the Sound with over 700 seals counted on the ice. Ice in the bay provides floating platforms for resting during pupping in early summer and molting in late summer through early fall. The Copper River, as it enters the Sound, provides a wealth of resources for harbor seals which aggregate there in large numbers, particularly at peak abundance in August. The few dozen haulouts in this region are estimated to host almost 7,000 individuals during the August molting season (see map below).

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FIGURE 4-9: HARBOR SEALS IN THE PRINCE WILLIAM SOUND AREA

(Source: National Marine Fisheries Service)





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Sea Otters are estimated at 10,000 to 12,000 individuals occupying Prince William Sound with 90% of the world population residing in the near shore, coastal waters of Alaska. Sea otters were heavily impacted by the Exxon Valdez oil spill (EVOS). In 2010, the EVOS Trustee Council listed this species as "recovering". Food items preferred by the sea otters include crustaceans and mollusks, but they also eat fish and octopus. Sea otters often use stones to help crack shells of food items and frequently roll to clean their fur in the water. This is necessary to keep thermoregulation at an optimum since sea otters lack an insulating layer of fat (blubber) and they rely solely on their fur for insulation. Sea otters require ¼ of their weight in food per day. The northwest coast of Montague Island provides excellent habitat for sea otters. High sea otter concentrations are found in Port Gravina, Sheep Bay, Simpson Bay, and around Surprise Glacier. Sea otters pup near the northeast end of Evans Island, and overwinter on the west side of LaTouche Island. Orca Inlet has high sea otter densities. The nearshore waters and shoreline of Port Etches have been designated as concentration areas for sea otters. A high concentration of sea otters has been documented in Barry Arm. The Chugach National Forest has documented large numbers of sea otters around Wooden Island. Strong populations of forage fish and invertebrates in Tatitlek Narrows support large populations of sea otters. High concentrations of sea otters are also found in the Bligh and Busby islands. Sea otters utilize the shallow exposed waters in the lower half of Unakwik Inlet where greater benthic biomass exists. Eshamy Bay provides protected sea otter pupping areas and has been designated as a concentration area for sea otters. For more about sea otters: http://www.fws.gov/alaska/fisheries/mmm/seaotters/otters.htm.

Steller Sea Lion populations within Prince William Sound consist of both the Western Distinct Population Segment (WDPS) and Eastern Distinct Population Segment (EDPS). The WDPS has been listed as endangered by the Endangered Species Act since 1997. The EDPS was removed from the Endangered Species Act list in 2013. During May through August, territorial breeding behavior occurs on the rookeries. Pupping occurs from late May to early July; most pups are born during June. Steller sea lions use the Needle, Point Elrington, Glacier Island, Perry Island, and the Pleiades Islands as year-round haulouts. Steller Sea Lion rookeries in Prince William Sound are Seal Rocks, Wooded Island, and the Chiswell Islands. The National Marine Fisheries Service has designated these rookeries as critical habitat for this endangered species. Patton Bay and the surrounding islands provide Steller sea lions with access to dense concentrations of forage fish. Fish Island has been used as a haulout of Steller sea lions since the 1970s. A major haulout located at Kayak Island in the Gulf of Alaska has approximately 144 individuals. Please see map below for further Steller sea lion critical habitat delineations.

<u>Terrestrial Mammals:</u> Several species of large terrestrial mammals are abundant throughout the Prince William Sound area. Brown and black bear, moose, Sitka black-tailed deer, Dall sheep, and mountain goats are common throughout the Prince William Sound region.

<u>Sitka black-tailed deer</u> were introduced throughout Prince William Sound between 1916 and 1923. During summer, deer generally feed on herbaceous vegetation and the green leaves of shrubs. During winter, they are restricted to evergreen forbs and woody browse. When snow is not a problem, evergreen forbs such as bunchberry and trailing bramble are preferred. During periods of deep snow, woody browse such as blueberry, yellow cedar, hemlock, and arboreal lichens are used. Woody browse alone, however, is not an adequate diet and deer rapidly deplete their energy reserves when restricted to such forage. Islands known to have concentrations of deer include Elrington, Montague, Bligh, Hawkins, Port Gravina, Mummy, Hinchinbrook, LaTouch, and Evans. The Prince William Sound population is estimated from 8,000 to 12,000 individuals and one estimate states that between 70% and 75% of the deer population in the Sound resides on Hawkins, Hinchinbrook, and Montague islands.

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Moose occur in habitats throughout much of the Prince William Sound region, ranging from aquatic and riparian floodplains to sub-alpine willow-dominated areas. Sedge meadows, ponds and lakes with extensive aquatic vegetation, riparian and subalpine willow stands, and forested areas provide important summer habitat for moose. Important winter habitat includes shrub-dominated alpine and riparian areas, and forested areas. During fall and winter, moose consume large quantities of willow, birch, and aspen twigs. In some areas, moose actually establish a "hedge" or browse line 6 to 8 feet above the ground by clipping most of the terminal shoots of favored food species. Spring is the time of grazing as well as browsing. Moose eat a variety of foods, particularly sedges, equisetum (horsetail), pond weeds, and grasses. During summer, moose feed on vegetation in shallow ponds, forbs, and the leaves of birch, willow, and aspen. Riparian areas along the major rivers and tributary streams are particularly important during winter. Calving occurs in late May and early June, frequently in isolated marshy lowlands. Moose concentrations along the Copper River drainage are apparent.

Brown Bears are distributed throughout Prince William Sound, with the exception of Middleton Island and small islands throughout the Sound. The population on Montague Island is recovering from overharvesting in the 1970s and early 1980s. Bear concentrations may be found along rivers when spawning salmon are present. Brown bears consume a wide variety of foods including: berries, grasses, sedges, horsetails, cow parsnips, fish, ground squirrels, carrion, and roots of many kinds of plants. In some parts of Alaska, brown bears have been shown to be capable predators of newborn moose and caribou, also killing adults and domestic animals. Brown bears enter dens beginning in late October, with most bears denned by mid-December. Bears emerge from their dens as early as mid-March, depending on weather conditions. No census has been completed in Prince William Sound for population numbers, but population densities on the adjacent Copper River delta reportedly varies from 1 per 3.3 to 4.6 square miles. Brown bears are abundant at the head of Port Gravina. Brown bears are very numerous in the Nellie Martin River area due to the abundance of pink and silver spawning salmon. Bears concentrate at the freshwater inlets of Eshamy Bay for the spawning pink and sockeye salmon returning from the sea. East of the line from Point Freemantle out Montague Strait is brown habitat. Both black and brown bears visit tidal flats in the spring to graze on the grass and sedge communities. This occurs from mid-late April through late June. Use of intertidal areas decreases during mid-summer, although individuals will visit to dig clams or scavenge beached carcasses. Once the salmon return to streams in August, bears concentrate along the streams near tidewater to feed. In eastern PWS, brown bears mostly keep black bears away from streams. Brown bears will stay near salmon streams until the runs play out, sometimes into October.

Black Bears are found throughout the Prince William Sound area with the exception of Montague, Hinchinbrook, Hawkins, Kayak, and Middleton islands, and several other small islands in Prince William Sound. The black bear is omnivorous, and they consume freshly sprouted green vegetation, carrion, fresh kills of young moose and deer, and berries. In western PWS, black bears feed on salmon during August and then head for berry country, usually in the higher elevations. They measure about 26 inches at the shoulder and about 60 inches from nose to tail. Male black bears weigh around 200 pounds in spring and about 20% more in fall before denning. Three color phases of black bear occur in Alaska: jet black, brown (or cinnamon), and blue. The blue color bears, or glacier bears, occur in a restricted coastal belt from Prince William Sound to the northern fringes of southeast Alaska. Black bears lack a prominent shoulder hump and usually have a conspicuous patch of white on their chests. Reported densities of black bears in Prince William Sound range from 2.5 bears per square mile to 8 to 10 per square mile.

<u>Furbearers.</u> Beavers, coyotes, red foxes, lynx, martin, mink, muskrats, land otters, and wolverines are all present in the Prince William Sound area. Historical information on population status is mostly anecdotal. ADF&G sealing monitors harvests of beavers, lynx, land otters, and wolverines. Lynx are relatively scarce

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in the area. It is suggested by C. Rhode that coyotes are relatively new to the area and did not become a dominant canine until 1938. Marten densities are variable, and excessive trapping is thought to result in low numbers in the Copper and Bering river areas.

In the Prince William Sound area, beaver, mink, and river otter are common inhabitants of aquatic and riparian floodplain and wetland areas, including marshes, ponds, lakes, streams, and rivers. Mink are considered to be common to abundant through the Sound area. They prey on a variety of animals and feed on anything they can capture and kill. They are adapted to capture aquatic and terrestrial prey including mammals, fish, birds, amphibians, crustaceans, and insects. Fish are their main food item. River otters are considered to be common to abundant in the Prince William Sound area. Diet of the river otters consist of fish, crustaceans, amphibians, insects, birds, and mammals. Fish compose the majority of the river otter's diet. High concentrations of river otters occur in the Bligh and Busby islands due to the high quality intertidal and subtidal biota.

Wolves and Foxes are found throughout Prince William Sound, however they have not become established on the major islands where deer would be adequate prey. Wolves are carnivores, and in most of mainland Alaska moose and/or caribou are their primary food, with Dall sheep being important in limited areas. In Southeast Alaska, Sitka black-tailed deer, mountain goats, and beaver are the most important sources of food. During summer, small mammals including voles, lemmings, ground squirrels, snowshoe hares, beaver, and occasionally birds and fish are supplements in the diet. The rate at which wolves kill large mammals varies with prey availability and environmental conditions. A current Alaska Department of Fish and Game report for the Prince William Sound and north Gulf Coast area suggests a stable wolf population of 50-65 wolves in 8 packs. Wolves and foxes select den sites where unfrozen, well-drained soils occur (e.g., dunes, river banks, and moraines). Wolves may initiate den construction in mid-April with pups being born from mid-May through early June. Dens may be occupied until August. Red foxes have a reproductive pattern similar to that of wolves. They are relatively scarce in the Prince William Sound area. The last significant harvest of red fox was in 1972 in Unit 6C and the fox is thought to have been displaced as coyote populations increased.

**Vegetation:** Rare plant species are identified below, as documented by the Alaska Natural Heritage Program. The map on the following page identifies the general locations of these rare plants. For more information, check the web site at: <a href="http://aknhp.uaa.alaska.edu/botany/rare-plants-species-lists/">http://aknhp.uaa.alaska.edu/botany/rare-plants-species-lists/</a>.

## RARE PLANTS KNOWN FROM THE PRINCE WILLIAM SOUND AREA

Global Rank	State Rank	Scientific Name	Common name
G1G2		Arabis codyi	
G1G2Q	S1	Isoetes truncata	TRUNCATE QUILLWORT
G1G2Q	S1S2	Cochlearia sessilifolia	
G1Q	S1	Cryptantha shackletteana	SHACKLETTES' CATSEYE
G1Q	S1	Draba kananaskis	TUNDRA WHITLOW-GRASS
G2G3	S2S3	Douglasia alaskana	ALASKA ROCK-JASMINE
G3	S1S2	Lesquerella calderi	CALDER'S BLADDER-POD
G3	S2	Lupinus kuschei	YUKON LUPINE
G3	S2	Poa laxiflora	LOOSE-FLOWERED BLUEGRASS
G3	S2S3	Douglasia arctica	MACKENZIE RIVER DOUGLASIA
G3	S2S3	Oxytropis huddelsonii	

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U31214U	34	Douecumeon paichellam		
G5T2T4Q	S2	Dodecatheon pulchellum	u	
G5T2T3Q	S2S3	Smelowskia calycina var porsildii		
G5T2Q	S2	Arnica lessingii ssp norbergii	NORBERG ARNICA	
G5	S3S4	Minuartia dawsonensis		
G5	S3S4	Malaxis monophyllos	WHITE ADDER'S-TONGUE	
G5	S3	Zannichellia palustris	HORNED PONDWEED	
G5	S2	Salix hookeriana	HOOKER WILLOW	
G5	S2	Ceratophyllum demersum	COMMON HORNWORT	
G5	S2	Agrostis thurberiana	THURBER BENTGRASS	
G5	S1S2	Juniperus horizontalis		
G5	S1	Viola sempervirens	REDWOODS VIOLET	
Global Rank	State Rank	Scientific Name Comn	non name	
G5	S1	Draba densifolia	DENSE-LEAF WHITLOW-GRASS	
G5	S1	Agoseris glauca	PALE FALSE-DANDELION	
G4T3	S2?	Draba lonchocarpa var vestita		
G?	S2S3	Elymus calderi		
G4T2T3Q	S2?	Phlox richardsonii ssp richards	onii RICHARDSON'S PHLOX	
G4Q	S3	Pedicularis macrodonta	BIGTOOTH LOUSEWORT	
G4G5	S2	Lonicera involucrata		
G4?	S2	Carex holostoma		
G4	S4	Erysimum pallasii	PALLAS WALLFLOWER	
G4	S3S4	Festuca brevissima	BALLAC 14/ALLE: 200:52	
G4	S3	Colpodium vahlianum		
G4	S3	Asplenium trichomanes-ramosum GREEN SPLEENWORT		
G4	S2	Carex heleonastes HUDSON BAY SEDGE		
G4		Carex sychnocephala	MANY-HEADED SEDGE	
	S1 S1		MANY HEADED SEDOF	
G4 G4	S1 S1	Carex laxa	A SEDGE	
G4	55 S1	Carex adelostoma	A SEDGE	
G3Q	S3	Taraxacum carneocoloratum	PINK-FLOWER DANDELION	
G3G4Q	S3S4	Castilleja annua	ANNUAL INDIAN-PAINTBRUSH	
G3G4Q	S3S4	Atriplex alaskensis	ALASKA ORACHE	
G3G4	S3S4	Draba stenopetala	ANADYR WHITLOW-GRASS	
G3G4 G3G4	S3	Papaver alboroseum	PALE POPPY	
G3G4	S1S2	Draba porsildii	PORSILD'S WHITLOW-GRASS	
G3?	55 S2	Phyllospadix serrulatus	SERRULATE SURF-GRASS	
G3	S3	Thlaspi arcticum	ARCTIC PENNYCRESS	
G3	S3	Stellaria alaskana	ALASKA STARWORT	
G3	S3	Rumex beringensis	S.O.C. GIOT WIND	
G3	S3	Romanzoffia unalaschcensis	UNALASKA MIST-MAID	
G3	S3	Platanthera chorisiana	CHORISO BOG-ORCHID	
G3	S3	Montia bostockii	BOSTOCK'S MINER'S-LETTUCE	
G3	53 S3	Douglasia gormanii Draba ruaxes	RAINIER WHITLOW-GRASS	
G3	S3	Aphragmus eschscholtzianus	GORMAN'S DOUGLASIA	
G3	S3	Phacelia mollis	MACBRIDE PHACELIA	
G3	S2S3	Phacalia mallic	MACDDIDE DUACELIA	

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		ssp alaskanum	ALASKAN PRETTY SHOOTING-STAR
G5T3	S3	Astragalus harringtonii	
G5T3Q	S3	Carex lenticularis var dolia	GOOSE-GRASS SEDGE
G5T3T4	S2	Saxifraga nelsoniana ssp porsil	diana HEART-LEAF SAXIFRAGE
G5T4Q	S2	Trisetum sibiricum ssp litorale	SIBERIAN FALSE-OATS
G5T5	S1	Poa douglasii ssp macrantha	

## Species Ranks used by the Alaska Natural Heritage Program

## **Species Global Rankings**

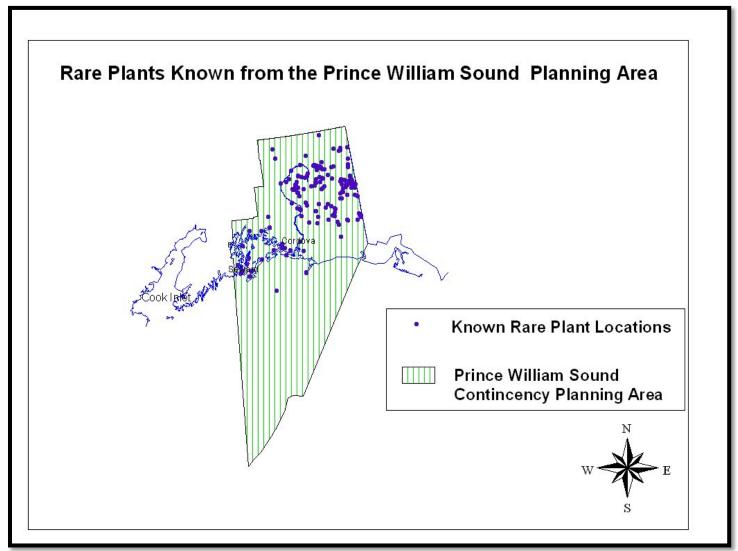
- G1: Critically imperiled globally (5 or fewer occurrences)
- G2: Imperiled globally (6-20 occurrences)
- G3: Rare or Uncommon globally (20-100 occurrences)
- G4: Apparently secure globally, but cause for long-term concern (>100 occurrences)
- G5: Demonstrably secure globally
- G#G# Rank of species uncertain, best described as a range between two ranks
- G#Q Taxonomically questionable
- G? Unranked
- G#T# Global rank of species and global rank of the described variety or subspecies

## **Species State Rankings**

- S1: Critically imperiled in state (5 or fewer occurrences)
- S2: Imperiled in state (6-20 occurrences)
- S3: Rare or Uncommon in state (20-100 occurrences)
- S4: Apparently secure in state, but cause for long-term concern (>100 occurrences)
- S5: Demonstrably secure in state
- S#S# Rank of species uncertain, best described as a range between two ranks

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FIGURE 4-10: RARE PLANTS KNOWN FROM THE PRINCE WILLIAM SOUND PLANNING AREA



#### 4640.4.3 - Human Resource Uses

#### 1. Fish Hatcheries and Associated Ocean Net Pens

All five species of Pacific salmon are produced in hatcheries in the area. In recent years, hatchery production has accounted for the majority of the commercial salmon harvest in the Sound. Direct telephone communication with all but the Solomon Gulch and Gulkana hatcheries is difficult or impossible. The easiest means of notifying the remote hatcheries is via the PWSAC office in Cordova listed below.

The hatchery activities most vulnerable to spill damage include fry rearing and release, terminal harvests, and egg takes. However, since the timing of these activities varies by hatchery and species, it is difficult to generalize about what occurs when, although spring and summer will tend to be the most critical times. Hatchery managers should be contacted for specific information.

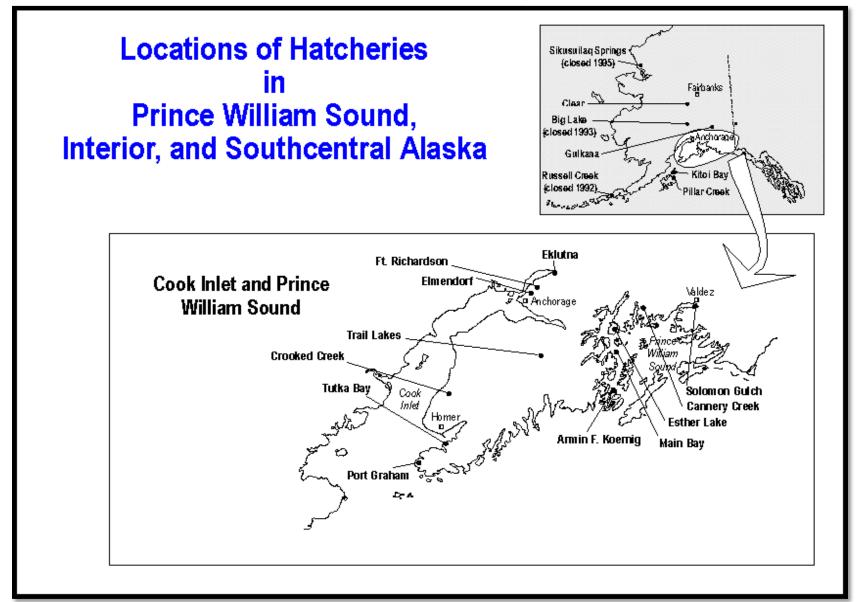
Currently, there is remote release of chum salmon to Port Chalmers on north Montague Island originating from the WN Hatchery. Main Bay Hatchery releases coho salmon to Solf Lake. There is a remote release of coho salmon to Whittier, Chenega, and Cordova from the WN Hatchery.

For additional information on hatcheries in Prince William Sound contact the Alaska Department of Fish and Game in Cordova.

#### **Fish Hatcheries**

Operator, Hatchery, City, Phone	Salmon Species
Prince William Sound Aquaculture Assoc.: Main Bay Hatchery, Cordova 835-4193	Sockeye
Cannery Creek Hatchery, Whittier 424-7511	Pink
Gulkana Facilities, Glennallen 822-5141	Sockeye
AFK Hatchery, Cordova	Pink
WN Hatchery, Cordova 265-9618	Pink, Chum, Coho,
Valdez Fisheries Development Assoc.: Solomon Gulch Hatchery, Valdez 835-1329	Pink and Coho

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# 2. Aquaculture Sites

Commercial aquatic farms are currently raising Pacific oysters in Prince William Sound. The number of applications for aquatic farm permits is on the rise and the number of farms may increase significantly in the near future. The locations of the current shellfish farms granted permits are shown in the following figure.

Aquatic farms are vulnerable to spill damage on a year-round basis since the shellfish are suspended from anchored gear and are submerged continuously in the water column. Harvest takes place year round. For more information see the following map at:

http://www.asgdc.state.ak.us/maps/cplans/pws/pws3aqua.pdf.

Prince William Sound Active Aquatic Farms

(Source: Alaska Department of Natural Resources)

Map Code	Company	Contact	City	Telephone	
ADL	Aquabionics, INC/New	Jack Van	Prince William Sound/Perry	479-2476	
225239	Wave Seafoods	Hyning	Island	173 2 170	
ADL	Dojer LTD	Gerald	Prince William	472-2319	
225257	Dojei E1D	Protzman	Sound/Fairmont Cove	472-2319	
ADL	Pristine Products	David	Prince William Sound/Wells	255-2340	
225295	Pristine Products	Sczawinski	Passage	255-2540	
ADL	Dricting Draducts	David	Prince William Sound/Eaglek	255-2340	
225296	Pristine Products	Sczawinski	Bay	233-2340	
ADL	Tatitlak Mariaultura Draiast	Tatitlek IRA	Prince William	424 2777	
225865	Tatitlek Mariculture Project	Council	Sound/Tatitlek Narrows	424-3777	
ADL	C.C. Overton Company	David Chinnen	Prince William Sound/Windy		
226332	C.C. Oyster Company	David Chipman	Bay		
ADL	Duisting Duodusts	David	Prince William Sound/Squaw	255 2240	
226577	Pristine Products	Sczawinski	Bay	255-2340	
ADL	Fools Challfish Forms	lamas Asuis r	Prince William	424 2492	
226846	Eagle Shellfish Farm	James Aguiar	Sound/Simpson Bay	424-3482	
ADL	Windy Bay Oyster	John Wisso	Prince William Sound/Windy	424 7754	
226874	Company	John Wiese	Bay	424-7754	
ADL		Milliana Kallari	Prince William		
227611	McClure Bay Oyster Farm	William Kelley	Sound/McClure Bay		

# Maps of Aquaculture Sites:

Aqua farm map for Blue Fiord and McClure Bay: <a href="http://www.asgdc.state.ak.us/maps/cplans/pws/PWSbluefiordmclurebay.pdf">http://www.asgdc.state.ak.us/maps/cplans/pws/PWSbluefiordmclurebay.pdf</a>

Aqua farm map of Fairmont Bay: http://www.asgdc.state.ak.us/maps/cplans/pws/PWSfairmont.pdf

Aqua farm map of Perry Island: <a href="http://www.asgdc.state.ak.us/maps/cplans/pws/PWSperryisland.pdf">http://www.asgdc.state.ak.us/maps/cplans/pws/PWSperryisland.pdf</a>

Aqua farm map of Simpson and Windy Bays: http://www.asgdc.state.ak.us/maps/cplans/pws/PWSsimpsonwindybays.pdf

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Aqua farm map of Squaw Bay: http://www.asgdc.state.ak.us/maps/cplans/pws/PWSsquawbay.pdf

Aqua farm map of Tatitlek: http://www.asgdc.state.ak.us/maps/cplans/pws/PWStatitlek.pdf

#### 3. **Historic Properties**

The area contains a multitude of known and unidentified archaeological and historic sites. These sites are not identified here, in order to protect them from scavenging. Oil spills and hazardous substance releases may result in direct and/or indirect impacts to those historic properties. On-Scene Coordinators are responsible for ensuring that response actions take the protection of historic properties into account and that the statutory requirements for protecting them are met. The *RCP* outlines Federal On-Scene Coordinator responsibilities for protecting historic properties and provides an expedited process for compliance with Section 106 of the National Historic Preservation Act during the emergency phase of a response. The Alaska Department of Natural Resources State Historic Preservation Office should be contacted at 907-269-8721 for information on archeological and historic sites.

#### 4. Subsistence and Personal Use Harvests

Subsistence-related uses of natural resources play an important role in the economy and culture of many communities in the area. A subsistence economy may be defined as follows:

...an economy in which the customary and traditional uses of fish, wildlife and plant resources contribute substantially to the social, cultural and economic welfare of families in the form of food, clothing, transportation and handicrafts. Sharing of resources, kinship-based production, small scale technology and the dissemination of information about subsistence across generational lines are additional characteristics.

Before 1990, the State of Alaska made all decisions regarding the management of fish and wildlife resources and harvest opportunities. In 1990, however, federal agencies became responsible for assuring a federal subsistence priority on federal public lands, and in 1999 on federal reserved waters. The Federal Subsistence Board adopts subsistence regulations that are administered by various federal agencies on federal public lands. State regulations continue to apply to State and private lands. As a consequence, the number of agencies involved in regulating subsistence uses has increased. Therefore, in the event of a spill, extensive coordination will be required in order to address subsistence resources. Regulations regarding subsistence harvest can also be expected to undergo further regular modification. Current information on harvest regulations can be obtained from the Alaska Department of Fish and Game (http://www.subsistence.adfg.state.ak.us/) or the U.S. Department of the Interior's Office of Subsistence (http://www.doi.gov/subsistence/index.cfm).

Subsistence uses in the area are extensive and vary by season, resource, and village. Some information about subsistence uses is community-sensitive. Contacts for potentially affected communities are identified in the Response Section, Part One.

#### 5. Commercial Fishing

The following chart provides general information on the timing of major commercial fisheries in the area. It must be remembered, however, that all fishing seasons are subject to emergency openings and closures and that many seasons are only open for a portion of the times specified in the regulations. Also, fishing regulations and seasons can change from year to year. Specific information on which species are currently

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being harvested may be obtained from the Alaska Department of Fish and Game, Commercial Fisheries Division in Anchorage.

Maps of key commercial fishing areas are available in the following Alaska Department of Fish and Game publications: the <u>Alaska Habitat Management Guide Reference Maps, Southcentral Region, Vols. 1 and 2</u> and the <u>Alaska Habitat Management Guide, Southcentral Region Map Atlas</u>. For more information see: <a href="http://www.cf.adfg.state.ak.us/">http://www.cf.adfg.state.ak.us/</a>.

Economically speaking, the salmon fishery is the most important commercial harvest activity. Pink salmon, produced in large part by the Prince William Sound hatcheries, are the mainstay of the industry, although the Copper River sockeye gill net fishery is also very productive. Copper River sockeye are also the first major salmon run of the season, starting in mid-May. The herring fishery has historically been economically significant, but the stocks have been depressed.

The following groups can be contacted with requests for specific information on location and timing of fish and wildlife as well as local current conditions. Although the primary function of these organizations is not to provide such information, the individual members will be quite knowledgeable about environmental conditions and will often be willing to share information.

Cordova District Fishermen United – Cordova (907)424-3447 \FAX 424-3430 Prince William Sound Aquaculture Corporation – Cordova (907) 424-7511 Valdez Fisheries Development Association – Valdez (907) 835-1329 Cordova Aquatic Marketing Association – Cordova (907)424-3458 Alaska Shellfish Grower's Association – Anchorage (907) 248-7709

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General Commo	ercial F	isherie	s Timin	g								
Prince William	Sound											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salmon												
Seine Net												
Gill Net												
Set Net												
Herring												
Sac Roe												
Roe-On-												
Kelp												
Bait												
Halibut <sup>1</sup>												
Pacific Cod												
Pollock <sup>2</sup>												
Sablefish												
Crab												
Dungeness <sup>3</sup>												
Brown King <sup>3</sup>												
Shrimp												
Pots												
Trawls												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

<sup>&</sup>lt;sup>1</sup> Halibut fisheries timing are determined by the IPHC every year.

Subsistence crab fishery only. No commercial crab fisheries in PWS.

# 6. **6. Sport Fishing and Hunting**

Sport fishing and hunting occurs at a wide variety of locations in the area throughout the year. Seasons and harvest regulations vary depending on the species and the area, and may be changed from year to year. Contact the Alaska Department of Fish and Game for current seasons within the area of the spill. For more information see <a href="http://www.sf.adfg.state.ak.us/">http://www.sf.adfg.state.ak.us/</a>.

#### 7. Recreational Sites and Facilities

(see also Land Management Designations)

(a) Alaska Department of Natural Resources: State Parks, Picnic Areas, and Campgrounds:

Name, Nearest Community

Bettles Bay State Marine Park, Whittier

Blueberry State Recreation Site, Valdez

Boswell Bay State Marine Park, Cordova

Canoe Passage State Marine Park, Cordova

Decision Point State Marine Park, Whittier

Dry Creek State Recreation Site, Glennallen

Eagle Trail State Recreation Site, Tok

Entry Cove State Marine Park, Whittier

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<sup>&</sup>lt;sup>2</sup> Pelagic trawl gear only.

Granite Bay State Marine Park, Whittier Horseshoe Bay State Marine Park, Chenega Bay Jack Bay State Marine Park, Valdez Kayak Island State Marine Park, Cordova Lake Louise State Recreation Area, Glennallen Liberty Falls State Recreation Site, Chitina Little Nelchina State Recreation Site, Glennallen Little Tonsina State Recreation Site, Copper Center Moon Lake State Recreation Site, Tok Porcupine Creek State Recreation Site, Tok Sawmill Bay State Marine Park, Valdez Shoup Bay State Marine Park, Valdez South Esther Island State Marine Park, Whittier Squirrel Creek State Recreation Site, Copper Center Surprise Cove State Marine Park, Whittier Tok River State Recreation Site, Tok Tolsona Creek State Recreation Site, Glennallen Worthington Glacier State Recreation Site, Valdez Zeigler Cove State Marine Park, Whittier

For more information see: http://www.dnr.state.ak.us/parks/.

# Bureau of Land Management: Name, Nearest Community

Alaska Public Lands Information Center, Tok
Tangle Lakes Campground, Paxson
Tangle River Campground, Paxson
Paxson Lake Wayside, Paxson
Paxson Lake Campground, Paxson
Sourdough Campground, Glenallen

## U.S. Forest Service: Name, Nearest Community

Alaganik Bridge, Cordova Alaganik Slough, Cordova Cabin Lake, Cordova Childs Glacier, Cordova

## (b) Public Use Cabins (U.S. Forest Service): Name, Nearest Community

Pigot Bay, Whittier
Shrode Lake, Whittier
Coghill Lake, College Fiord
Harrison Lagoon, Port Wells
Paulson Bay, Whittier
South Culross Passage, Whittier
San Juan Bay, Montague Island
Barber, Montague Island
Port Chalmers, Montague Island
Beach River, Montague Island
Nellie Martin River, Montague Island

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Caribou Creek, Green Island
Double Bay, Hinchinbrook Island
Hook Point, Hinchinbrook Island
Shelter Bay, Hinchinbrook Island
Martin Lake, Copper River Delta
Softuk Bar, Copper River Delta
Pete Dahl, Copper River Delta
Tiedeman Slough, Copper River Delta
McKinley Trail, Copper River Delta
McKinley Lake, Copper River Delta
Power Creek, Cordova
Jack Bay, Valdez

For more information see: http://www.fs.fed.us/recreation/reservations/.

(c) Public Anchorages and Moorings: Name, Nearest Community

West Twin Bay, Perry Island South Bay, Perry Island Esther Bay, Perry Island Head of Eaglek Bay, Perry Island Deep Water Bay, Port Nellie Juan Derickson Bay, Port Nellie Juan Long Bay, Culross Passage Picturesque Cove, Culross Passage Applegate Island, Culross Passage Goose Bay, Culross Passage Shotgun Cove, Passage Canal Jackson Hole, Glacier Island Jackson Cove, Glacier Island Jackpot Bay, Dangerous Passage Marsha Bay, Dangerous Passage Paddy Bay, Dangerous Passage Granite Bay, Dangerous Passage Ewam Bay, Dangerous Passage Masked Bay, Dangerous Passage

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## **ALASKA STATE PARKS**

Alaska Department of Natural Resources Division of Parks and Outdoor Recreation

# Alaska State Parks in the Prince William Sound Region (maps and charts)

- 1. Cordova (SE Prince William Sound)
- 2. Valdez (NE Prince William Sound)
- 3. Whittier (NW Prince William Sound)

# **Chart Key**

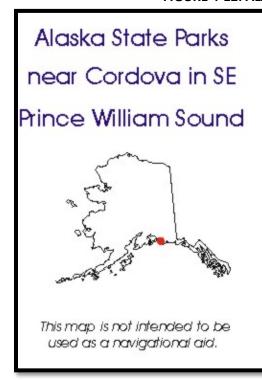
<b>CS</b> = Camp sites	<b>W</b> = Water, drin	ıkable	C = Cabins				
<b>CL</b> = Camping limit	<b>S</b> = Picnic shelte	er	<b>D</b> = Daily parking fee				
<b>CF</b> = Camping fee	Tr = Trails		<b>F</b> = Fishing				
P = Picnic sites	<b>H</b> = Historical fe	ature	* = Tent camping only				
<b>T</b> = Toilet	<b>B</b> = Boat launch		** = Annual passes not accepted				
/a = Facilities are ADA	accessible	*** = Sanitar	y dump station				

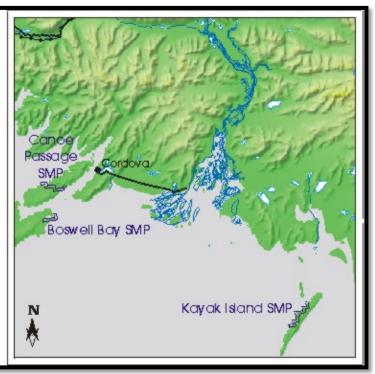
SRA = State Recreation Area	<b>SP</b> = State Park	<b>DU</b> = Day Use
SRS = State Recreation Site	SMP = State Marine Park	<b>GU</b> = Group Use
SHP = State Historical Park	<b>SWP</b> = State Wilderness Park	<b>CG</b> = Campground
SHS = State Historic Site	<b>TH</b> = Trailhead	<b>BL</b> = Boat Launch

For further information: <a href="http://www.dnr.state.ak.us/parks/">http://www.dnr.state.ak.us/parks/</a> or call 269-8700 (Anchorage Office). To access maps and charts: <a href="http://www.dnr.state.ak.us/parks/aspbro/statemap.htm">http://www.dnr.state.ak.us/parks/aspbro/statemap.htm</a>.

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FIGURE 4-12: ALASKA STATE PARKS NEAR CORDOVA

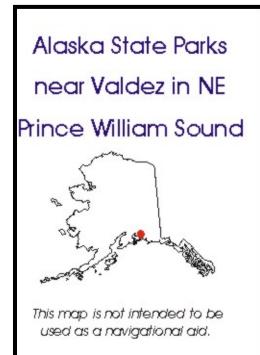


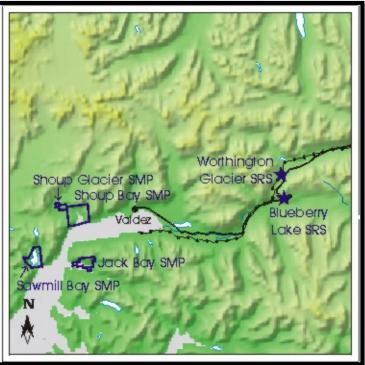


Park Unit	Acres	CS	CL	CF	Р	T	W	S	Tr	Н	В	С	D	F	Location
Boswell Bay SMP	799				Un	dev	elo <sub>l</sub>	oed						F	No road access
Canoe Passage SMP	2,735				Un	dev	elo <sub>l</sub>	oed						F	No road access
Kayak Island SMP	1,437				Un	dev	elo <sub>l</sub>	oed						F	No road access

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FIGURE 4-13: ALASKA STATE PARKS NEAR VALDEZ

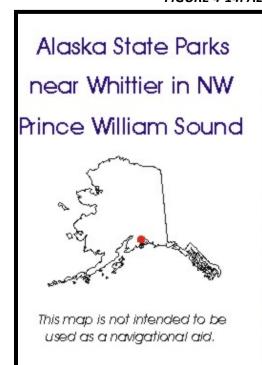


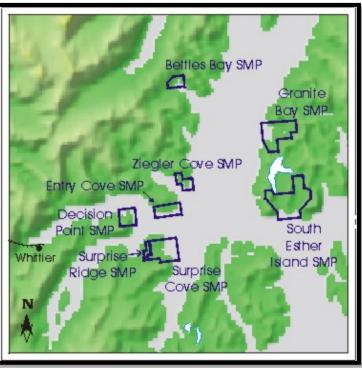


Park Unit	Acres	CS	CL	CF	Р	T	W	S	Tr	Н	В	С	D	F	Location
Blueberry Lake SRS	192	15	15	CF		T/a	W		Tr					F	23 Richardson Hwy.
Jack Bay SMP	811	3				Т								F	No road access
Sawmill Bay SMP	2,320	3				Т								F	No road access
Shoup Bay SMP	4,560	2				T/a			Tr			C/a		F	No road access
Shoup Glacier SMP	640				Un	deve	elop	ed							No road access
Worthington Glacier SRS	113					Т			Tr						28.7 Richardson Hwy.

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FIGURE 4-14: ALASKA STATE PARKS NEAR WHITTIER





Park Unit	Acres	CS	CL	CF	Р	T	W	S	Tr	Н	В	С	D	F	Location
Bettles Bay SMP	680				Un	dev	elo	ped						F	No road access
Decision Point SMP	460	4				Т								F	No road access
Entry Cove SMP	370				Un	dev	elo	ped						F	No road access
Granite Bay SMP	2,105				Un	dev	elo	ped						F	No road access
South Esther Island SMP	3,360	2				Т			Tr					F	No road access
Surprise Cove SMP	2,280	6				Т			Tr					F	No road access
Surprise Ridge SMP	240								Tr						No road access
Ziegler Cove SMP	720				Un	dev	elo	ped						F	No road access

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FIGURE 4-15: RECREATION SITES CHUGACH NATIONAL FOREST

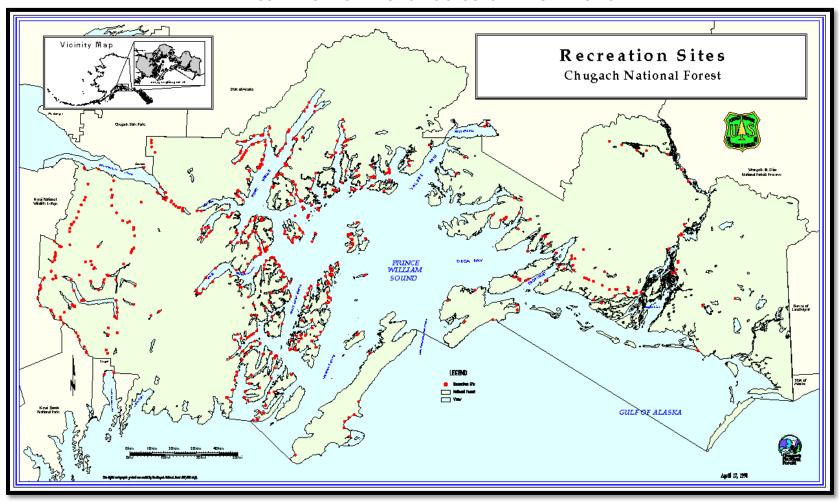
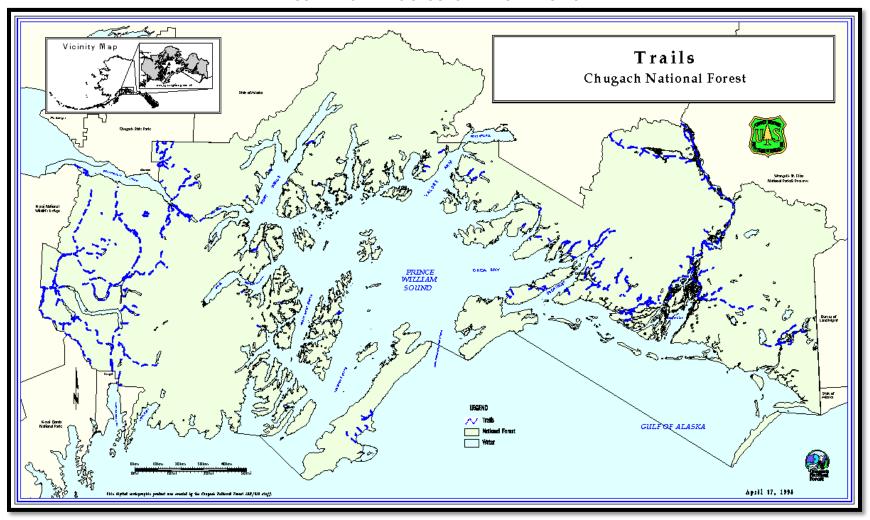


FIGURE 4-16: TRAILS CHUGACH NATIONAL FOREST



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#### 8. Commercial Tourism

- Tour boat, cruise ship, and ferry boat routes and stops
- Small boat and kayak use areas
- Road and rail routes and nodes at Whittier, Valdez, and Glennallen
- Commercial airport access at Valdez and Cordova

## Key locations of interest:

- Growler Island
- Heather Bay
- Columbia Bay
- Harriman Fjord
- Shoup Bay
- Blackstone Bay
- College Fjord

The following organizations can be contacted with requests for specific information on location and timing of recreation and tourism activities. Although the primary function of these organizations is not to provide such information, the individual members will be quite knowledgeable about environmental conditions and will often be willing to share information.

## For additional information contact:

Alaska Office of Tourism Development	465-2012
Alaska State Chamber of Commerce	586-2323
Alaska Native Tourism Council	274-5400
Alaska Wilderness Recreation & Tourism Assoc.	463-3038

See also: http://www.travelalaska.com.

- 9. Marinas and Ports (See Resources Section)
- 10. **Fish Processing** The following table identifies fish processors, canneries, and shellfish processors operating in Prince William Sound and provides the general location in which they operate and how to contact them. The list excludes fishing vessels and shellfish harvesters.

Cordova:	Whittier:
Saint Elias Ocean Products, Inc.	Anchor Services Unlimited
Cordova 424-7171	472-2354
•	Great Pacific Seafoods, Inc.
424-5920	472-2400
Great Pacific Seafoods, Inc.	Prince William Sound Aquaculture
424-5481	424-7511
Norquest Seafoods, Inc.	Fairmount Island Seafoods
424-5930	472-2319

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Prince William Sound Aquaculture F/V Wave Maker

424-7511 982-2670

Copper River Delta Smokery Valdez:

424-7111

Solomon Falls Seafood

Eyak Packing Co. 835-4874

424-5300

Solomon Gulch Hatchery

North Pacific Processors 835-4874

424-7111

Nautilus Foods, Inc

Ocean Beauty Seafoods, Inc. 835-4227

424-7171

Silver Bay Seafood

F/V Aquarius 835-8910

424-3385

Peter Pan Seafoods, Inc.

835-2080

11. **Logging Facilities** - The following organizations can be contacted with requests for specific information on location and timing of logging activities. Although the primary function of these organizations is not to provide such information, the individual members will be quite knowledgeable about environmental conditions and will often be willing to share information.

Koncor Forest Products

Anchorage

562-3335

FAX 562-0599

Alaska Forest Association

Ketchikan

225-6114

Current Log Transfer Facilities (LTFs) are:

<u>Location</u> <u>Operator</u>

Port Graham Bureau of Indian Affairs

Orca Inlet Eyak Corp.
Orca Bay Eyak Corp.
Cordova Eyak Corp.

# Permits expired, suspended, or not issued:

Montague Island, McCloud Harbor

Two Moon Bay

Fish Bay

Chugach Alaska Corp./Koncor Forest Products

Tatitlek Native Corp. Tatitlek Native Corp.

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12. **Water Intake and Use** - See Attachment One for a list of water intake/use permits generated from a database maintained by the Alaska Department of Environmental Conservation. The list shows "type A" water users, which are those systems serving 25 or more persons using the system for 6 or more months of the year.

## 4640.5 – Land Management

4640.5.1 - Land Management Designations

Access to Lands: Land ownership must be determined and landowners contacted to evaluate incident-specific protection priorities, obtain land-use permitting requirements, and obtain permission to access lands. Native corporation lands, as well as local, State, and Federal government lands often require special use permits. If an incident affects private lands or Native Allotments, permission to enter lands should be sought from the landowner. The local Borough government is often the best source of private land ownership records.

#### State:

<u>Tanana Valley State Forest.</u> The Tanana Valley State Forest was first designated in 1983 and currently contains 1,822,100 acres. Its area extends from north of Fairbanks to north of Tetlin Junction and closely follows the Tanana River on the north. The Forest's area encompasses or is adjacent to many bodies of water including the Tanana, Healy and Robertson rivers; lakes George and Mansfield; Fish, Sand Healy and Wolf lakes; and George, Sand, Mansfield, Fortymile and Billy creeks.

State Game Refuges, Habitats, Sanctuaries. The Alaska State Legislature has classified certain areas as being essential to wildlife and fisheries resources. These areas are designated as either a game refuge, critical habitat area, or game sanctuary. Management of these essential areas is the joint responsibility of the Department of Fish and Game and Department of Natural Resources. Legislation pertaining to these lands may be found in Alaska Statutes Title 16, Chapter 20. Legal descriptions of area boundaries can be found in Alaska Department of Fish and Game's publication, State of Alaska Game Refuges, Critical Areas and Game Sanctuaries (1991)or on their website http://www.adfg.alaska.gov/index.cfm?adfg=protectedareas.locator

Copper River Delta State Critical Habitat Area was established in 1978 to protect habitat crucial to perpetuation of fish and wildlife (especially waterfowl and shorebirds). The Area includes all public land, tideland, submerged land, and water covering the Copper River Delta from the mouth of Orca Inlet to Palm Point. This area is the largest contiguous Pacific coast wetland and is among the most productive and critical shorebird habitats in Alaska. The Copper River Delta is a feeding and resting area for more than 20 million shorebirds, which pass through on their spring migration. Among the migrants are nearly the entire Pacific coast population of dunlins and western sandpipers. During the spring and summer, the area also supports the entire U.S. nesting population of dusky Canada geese and a substantial number of trumpeter swans. The area is also popular for wildlife viewing, hunting and fishing.

For more information see the Cooper River Delta State Critical Habitat Area webpage at <a href="http://www.adfg.alaska.gov/index.cfm?adfg=copperriverdelta.main">http://www.adfg.alaska.gov/index.cfm?adfg=copperriverdelta.main</a>.

<u>State Marine Parks.</u> The Alaska State Legislature has classified certain areas as State Marine Parks (see Part 4.D.7, Recreational Sites and Facilities).

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#### Federal:

<u>Chugach National Forest</u> is the nation's second largest national forest at 5.6 million acres, stretching from the Kenai Peninsula for 200 miles to the Bering Glacier. Sport, subsistence, and commercial fishing; hunting; sightseeing; outdoor recreation; boating; hiking; and wildlife habitat are some of the primary uses of the Chugach. Additional information may be found on the website: <a href="http://www.fs.fed.us/r10/chugach/">http://www.fs.fed.us/r10/chugach/</a>.

<u>Research Natural Areas</u> are set aside on the Chugach National Forest to allow ecological processes to prevail with minimal human intervention and to provide opportunities for research to increase understanding of natural ecosystem processes and sustainability. Areas include:

- --Green Island
- --Kenai Lake/Black Mountain
- --Wolverine Glacier
- --Olsen Creek
- --Copper Sands

Wrangell-Saint Elias National Park and Preserve was established in 1980. The 13 million acre Park and Preserve abuts the border and Canada's Kluane National Park--together they have been designated on the World Heritage List as outstanding natural areas. The area contains the North American continent's largest assemblage of glaciers and its greatest collection of mountain peaks over 16,000 feet in elevation. The Malaspina Glacier is larger than the state of Rhode Island. Mount Saint Elias, at 18, 008 feet, is the second highest peak in the United States. Wilderness backpacking, fishing, and hunting, car camping, river running, cross-country skiing, and mountain climbing are principal uses. The Dall sheep population is considered one of the finest in the world. Additional information may be found on the website: <a href="http://www.nps.gov/wrst/index.htm">http://www.nps.gov/wrst/index.htm</a>.

<u>Wild and Scenic Rivers.</u> The upper Delta River and West and Middle Forks of the Gulkana River are nationally designated as Wild and Scenic Rivers and are managed by the Bureau of Land Management. The lower Nellie Juan River is proposed for Wild status by the U.S. Forest Service.

Alaska Maritime National Wildlife Refuge. The Gulf of Alaska Unit of the Refuge includes some of the islands, rocks, and forelands along the coast of the Gulf of Alaska. Alaska Maritime consists of over 2,400 islands, headlands, rocks, islets, spires, and reefs along the Alaskan coast, stretching from Southeast Alaska to Cape Lisburne on the Chukchi Sea. The Refuge is synonymous with seabirds. About 75 percent of Alaska's marine birds (15 to 30 million of 55 species) use the Refuge. The Refuge is also home to thousands of sea lions, seals, walrus, and sea otters. Wildlife viewing, photography, and backpacking are primary uses of the Refuge. The Refuge was established in 1980. Additional information may be found on the website: <a href="http://www.fws.gov/alaska/nwr/akmar/index.htm">http://www.fws.gov/alaska/nwr/akmar/index.htm</a>.

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#### 4640.5.2 - Land Management Maps

The Alaska Department of Natural Resources, under agreement with the Alaska Department of Environmental Conservation, produced digital base and land management maps for each of the areas using their ARC-INFO based Geographic Information System. The following land management maps provide an index to the Public Land Record and should not be viewed as legal documents. These maps are available at: <a href="http://www.asgdc.state.ak.us/maps/cplans/areas.html">http://www.asgdc.state.ak.us/maps/cplans/areas.html</a>.

For more current detailed information on land status, go to the Bureau of Land Management's Spatial Data Management System website at: <a href="http://sdms.ak.blm.gov/isdms/imf.jsp?site=sdms">http://sdms.ak.blm.gov/isdms/imf.jsp?site=sdms</a> and click on the Generalized Land Status layer.

Chugach Alaska Corporation also maintains a website providing on-line access to land status for their corporate holdings: <a href="http://www.chugach.com/who-we-are/lands/regional-map">http://www.chugach.com/who-we-are/lands/regional-map</a>.

# Prince William Sound Land Management Map Links:

http://www.asgdc.state.ak.us/maps/cplans/base/LegendPage.pdf

http://www.asgdc.state.ak.us/maps/cplans/pws/PWSmap1of4.pdf

http://www.asgdc.state.ak.us/maps/cplans/pws/PWSmap2of4.pdf

http://www.asgdc.state.ak.us/maps/cplans/pws/PWSmap3of4.pdf

http://www.asgdc.state.ak.us/maps/cplans/pws/PWSmap4of4.pdf

#### 4640.6 - Water Intake Use

The following table was generated by the Alaska Department of Environmental Conservation, Drinking Water and Water Treatment Section. The list shows "type A" water users, which are those systems serving 25 or more persons using the system for 6 or more months of the year. The table includes permitted water use facilities by index number, source (groundwater, surface water, purchased water), facility name, and facility location. Additional information about facility owners can be obtained from the Drinking Water and Water Treatment Section at 465-5300.

For the table, please note the following codes:

GW = Groundwater

GWP = Purchased Groundwater

SW = Surface Water

SWP = Purchased Surface Water

GU = Groundwater Under the District Influence of Surface Water

Name of System	Location	State ID No.	Source
Acres Convenience Store	Valdez	298909	
Ahtna Office Bldg.	Glennallen	294200	
Airport Depot Diner	Cordova	292275	GW
AK Dept. Fish & Game	Glennallen	291423	
AK Bible College	Glennallen	292099	GW
Aleutian Village	Valdez	298608	GW
Bartlett Ferry Terminal	Valdez	291910	
Bishop Water Supply	Glennallen	291499	GW
Blackburn Place Apartments	Glennallen	291261	GW
Brown Bear Roadhouse	Glennallen	291334	

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Chitina Fire Well #2	Chitina	292738	GW
Chitina Saloon	Chitina	291651	
City of Valdez Glacier CG	Valdez	298200	GW
Copper Basin Assembly of God	Glennallen	291473	GW
Cordova City Water	Cordova	293205	SW
CRNA Copper Center	Copper Center	291685	
CRNA Office Complex	Copper Center	292608	GW
Cross Road Medical Center	Glennallen	291512	GW
CRSD Copper Center School	Glennallen	291384	GW
CRSD Glennallen Elementary	Glennallen	291392	GW
CRSD Glennallen High School	Glennallen	291407	GW
CRSD Kenny lake Elem	Glennallen	291415	GVV
CRSD Kenny Lake High School	Glennallen	294002	GW
DOTPF Tazlina Station	Glennallen	291871	GVV
Eagle Crest Condos	Valdez	298002	GW
FAA Cordova Well #1	Cordova	293108	GVV
Glacier Spirit M/V	Valdez	292039	
Glennallen Heights	Glennallen	291504	GW
Grizzly Pizza	Copper Center	296802	GW
Kenny Lake Community Hall Well	Copper Center	292194	GW
Kenny Lake Community Well	Copper Center	291596	GW
·	Copper Center	292330	GW
Kenny Lake Fire Hall	Glennallen	_	GW
Lake Louise Lodge Last Frontier Pizza	Glennallen	226622	
		292225	
Lu Lu Belle M/V	Valdez	292055	
M/V Nautilus	Valdez	293190	CVA
McCarthy Lodge	Glennallen	291108	SW
McKinley Bldg Water Supply	Copper Center	292186	GW
New Caribou Hotel	Glennallen	291300	GW
PJ's Drive Inn	Copper Center	292063	
Point of View Lodge	Glennallen	224086	
PWSAC - Cannery Creek Hatchery	Cordova	293132	0.44
PWSAC - Esther Hatchery	Cordova	293124	SW
PWSAC - Pt. San Juan Hatchery	Cordova	291758	
Ranch House	Glennallen	291245	GW
Rendevouz	Glennallen	291287	GWP
Send International of Alaska	Glennallen	292110	GW
Solomon Gulch Hatchery	Valdez	292005	
Sweet Things	Glennallen	293176	
Tailor Made Pizza	Glennallen	293253	
Tastee Freeze Glennallen	Glennallen	291342	GW
Tazlina River MHP	Glennallen	291279	GW
Tiekel River Lodge	Valdez	296307	GW
Tiekel River Lodge Campground	Valdez	291978	
Tolsona Lake Resort	Glennallen	291368	GW
Tolson Wilderness Campground	Glennallen	291431	GW

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Tsaina Lodge	Valdez	296404	
Two Moon Bay Logging Camp	Cordova	292678	
Valdez Airport Terminal	Valdez	291986	GW
Valdez City Water System Main	Valdez	298103	GW
Valdez Robe River S/D Well	Valdez	291211	GW
Valdez Softball Fields	Valdez	291782	GW
Valdez Southcentral	Valdez	291229	GW
Valdez Spirit M/V	Valdez		
Valdez Zook Loop	Valdez	291203	GU
Whittier City Water System	Whittier	211952	SW
Wolverine Lodge	Glennallen	226478	

4640.7 - Harbor Seal and Steller Sea Lion Sites in Prince William Sound NOTE: a map of the sites identified in the table may be obtained from the Alaska Department of Fish and Game office in Anchorage.

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Site	Type*	Site Name	N*	Latitude <sup>1</sup>	Longitude <sup>1</sup>	Specific Habitat
1	А	Porpoise Rocks	51	60 19 06 N	146 41 30 W	Entire Site
2	В	Bear Camp/Pt. Etches	<10	60 21 12	146 43 54	West Shoreline Hinchinbrook Island Just North Of Port Etches
3	Α	Schooner Rocks	67	60 18 24	146 54 30	Entire Site
4	Α	Rocky Bay	25	60 21 00	147 01 30	Offshore Rocks Along South Shoreline East Of Middle Point
5	Α	Montague Point	37	60 22 12	147 04 30	Reefs Off North Shoreline
6	Α	Stockdale Harbor	49	60 18 12	147 12 30	2 Islets Off Southwest Shoreline
7	Α	Port Chalmer	109	60 14 44	147 15 08	Entire Site
8	Α	Channel Island	116	60 14 30	147 22 42	Entire Site
9	Α	Little Green Island	88	60 11 54	147 31 30	Entire Site
10	Α	Green Island	50	60 17 30	147 25 00	Northwest Side Of Island; Reefs Off Northwest Shore
11	Α	Applegate Rocks	154	60 21 18	147 23 30	Entire Site
12	Α	Seal Island	71	60 25 42	147 24 48	Entire Site
13	Α	Big Smith Island	78	60 31 35	147 19 30	Entire Site
14	А	Little Smith Island	33	60 31 06	147 25 36	Entire Site
15	Α	Agnes Island	43	60 36 54	147 23 12	Entire Site
16	В	Storey Island	<10	60 44 19	147 22 48	East And Southeast Shorelines
17	В	Northwest Bay	<10	60 33 42	147 35 54	Mid-Bay Islet
18	А	Disk Island	17	60 30 00	147 38 12	Entire Site
19	А	Herring Bay	36	60 26 36	147 44 18	Numerous Sites
20	В	Unnamed Cove	<10	60 26 42	147 38 12	Rocks In Southwest Part Of Cove
21	А	Bay Of Isles	37	60 23 36	147 40 00	Numerous Sites. Rocks And Reefs North And East Of Short Arm
22	В	Lower Herring Bay	<10	60 23 01	147 47 30	Rocks In Mid-Bay
23	Α	Squire Island	32	60 13 30	147 57 00	Numerous Sites - Complex Of Reefs, Islets, Tidal Rocks
24	В	Gage Island	<10	60 11 24	148 01 00	Entire Site
25	В	Fleming Island	<10	60 09 48	148 00 35	East Shoreline
26	В	Jackpot Bay	<10	60 20 24	148 12 18	North Shore Outer Jackpot Bay
27	Α	Iktua Rocks	39	60 07 12	148 02 30	Entire Site
28	Α	Iktua Bay	14	60 07 00	148 00 54	Rocks In West Part Of Bay

Site	Type*	Site Name	N*	Latitude <sup>1</sup>	Longitude <sup>1</sup>	Specific Habitat
29	Α	Prince Of Wales Passage	47	60 05 00	148 04 48	Islets On East Side Near Mid-Passage
30	Α	Latouche Island	39	59 56 24	148 02 30	Bedrock Benches Along Southwest And West Shoreline
31	Α	Danger Island	58	59 55 30	148 04 24	Entire Site And Adjacent Southwest Tip Of Latouche Island
32	Α	Procession Rocks	39	60 00 30	148 16 48	Entire Site; And South Shoreline Bainbridge Island
33	В	Hogg Bay 1	<10	60 04 12	148 12 24	Tidal Rocks In Southeast Bay
		Hogg Bay 2		60 05 00	148 14 42	Northern Part Of Outer Bay
34	Α	Bainbridge Passage 1	42	60 07 50	148 11 24	Rocks In Central Passage
		Bainbridge Passage 2		60 08 30	148 06 12	Rocks Near Islets In East Passage
35	Α	Icy Bay 1		60 11 00	148 26 30	On Drift Ice, Tiger Glacier
		Icy Bay 2	314	60 16 30	148 22 00	Nassau Fjord
36	В	Delenia Island	<10	60 20 31	148 07 57	Entire Site
37	Α	Junction Island	83	60 23 30	147 59 36	Rocks And Beaches North Of Island
38	Α	Port Nellie Juan	41	60 28 18	148 20 30	On Drift Ice And Base Of Nellie Juan Glacier
39	Α	Crafton Island	40	60 29 36	147 56 30	Reefs Off East, North, And West Side Of Island
40	Α	Lone Island	12	60 41 42	147 44 42	Tidal Rocks Off Northeast Tip Of Island
41	Α	Dutch Group	104	60 45 30	147 48 30	Entire Site
42	Α	Perry Island - South	>10	60 40 00	147 53 00	Rocks On East Side Of South Bay
43	В	Applegate Island	<10	60 37 06	148 09 30	Entire Site
44	Α	Blackstone Bay	>10	60 40 56	148 38 36	South Arm On Drift Ice
45	Α	Harriman Fjord	>10	60 58 30	148 26 00	Entire Bay, On Drift Ice Near Glaciers
46	Α	Harriman Fiord	136	61 07 30	148 09 00	North End Barry Arm
47	Α	College Fiord 1	218	61 16 30	147 42 30	On Drift Ice And Upper Harvard Arm
		College Fjord 2		61 12 48	147 41 07	On Drift Ice, Yale Arm
48	Α	Unakwik Inlet	293	61 09 00	147 31 30	On Drift Ice And North End Near Mears Glacier
49	Α	Columbia Bay	549	61 00 00	147 04 00	On Drift Ice And Behind Glacial Moraine At Head Of Bay
50	Α	Wells Bay	38	60 55 42	147 28 48	Rocks In Middle Of Southern Part Of Bay
51	В	Payday	<10	60 54 18	147 30 00	Shoreline East Of Unakwik Point
52	Α	Olsen Island	12	60 51 42	147 34 24	Rocks On South Side Of Island
53	Α	Point Pellew 1	24	60 50 24	147 39 30	Point Pellew
		Point Pellew 2		60 51 18	147 40 24	Small Islets East And North Of Point Pellew

Site	Type*	Site Name	N*	Latitude <sup>1</sup>	Longitude <sup>1</sup>	Specific Habitat
54	Α	Little Axel Lind	23	60 48 24	147 40 18	Entire Site
55	А	Fairmont	42	60 51 00	147 27 30	Southwest Shoreline Fairmont Is.; L. Fairmont Is.; Outpost Is.
56	Α	Gull Island 1	28	60 43 28	146 42 11	Rocks Offshore
		Gull Island 2		60 43 02	146 40 44	North Of Knowles Head - SUBSISTENCE HUNT AREA
57	Α	Upper Jack Bay	>10	61 01 27	146 34 08	Entire Site
58	Α	Port Fidalgo 1	>10	60 50 24	146 15 12	Rocks On Point 2 Mi. North Of Whalen Bay
59	В	Port Fidalgo 2	<10	60 47 11	146 21 02	Rocks On South Shoreline 1 Mi. East Of Irish Cove
60	Α	Hells Hole	>10	60 42 00	146 23 12	Entire Site
61	Α	Olsen Bay	80	60 43 42	146 10 48	Headland Between Olsen And Parshas Bays
62	Α	Gravina Rocks	42	60 39 48	146 15 54	Entire Site
63	Α	Gravina Island	24	60 38 24	146 17 30	Entire Site
64	Α	Canoe Passage	51	60 31 36	146 08 06	Rocks Off Entrance On North Side Hawkins Island
65	Α	Sheep Point	12	60 36 54	146 00 24	Entire Site
66	В	Hanks Island	<10	60 36 42	145 58 48	Entire Site
67	В	Sheep Bay	<10			Southeast Portion Of Sheep Bay
				60 32 30	145 51 00	
68	Α	Orca Inlet	235	То	То	Tidally Submerged Sandbars (Use On 4 Sites Varied)
				60 28 00	146 06 30	
69	Α	Hawkins Cutoff	204	60 26 12	146 19 30	Sandbar (Also Sea Otter Haulout)
70	Α	North Hinchinbrook	>20	60 28 30	146 30 00	Rocks Across Head Of Bay
71	Α	Middleton Island	1714	59 24 40	146 18 30	Flat-Top Rocks On East And South Sides Of Island
100	С	Tanker Island		59 52 18	147 22 30	Entire Site
101	С	Mccleod Harbor		59 54 00	147 48 56	Outer Northwest Shoreline
102	С	Sawmill Bay		60 03 00	148 01 30	Bettles Island
103	С	Whale Bay 1		60 12 03	148 10 48	Shorelines South Of Lat/Long
		Whale Bay 2		60 13 48	148 13 00	Shorelines West Of Lat/Long

Site	Type*	Site Name	N*	Latitude <sup>1</sup>	Longitude <sup>1</sup>	Specific Habitat
104	С	Pleiades Islands		60 14 00	148 01 00	Entire Site
105	С	E. Knight Is. Passage		60 19 00	147 55 00	Bays And Inlets Along West Shore Knight Island
106	С	Rua Cove		60 21 00	147 38 22	Entire Site
107	С	Kings Bay 1		60 31 36	148 36 12	Mid-Bay Along North Shoreline
		Kings Bay 2		60 30 42	148 32 12	South Shoreline
108	С	SE Culross Passage		60 36 18	148 11 24	Headland Between Mink Island And Picturesque Cove
109	С	Culross Island		60 40 12	148 05 00	East Shoreline Culross Island 3 Mi. South Of Hidden Bay
110	С	Cochrane Bay		60 44 52	148 19 34	Entire Site
111	С	Passage Canal		60 48 20	148 30 00	South Shoreline From Shotgun Cove To Decision Point
112	С	Pigot Bay		60 50 54	148 22 48	Inner Bay
113	С	Esther Island		60 52 45	148 06 19	Southwest Shoreline Of Granite Bay
114	С	Perry Island/W. Twin Bay		60 43 00	147 58 24	Entire Site
115	С	Fool Island		60 45 48	147 55 00	Entire Site
116	С	Bald Head Chris Island		60 47 30	147 50 42	Entire Site
117	С	Axel Lind Island		60 47 30	147 43 24	Entire Site
118	С	Long Bay		60 57 30	147 16 00	Rocks East Of Shrader Island
119	С	Peak Island		60 42 06	147 21 17	East Shoreline
120	С	Naked Island		60 39 00	147 23 30	Western, Southern, And Eastern Shorelines
121	С	Lower Jack Bay		61 01 38	146 38 30	Southwest Shoreline Of Outer Bay
122	С	Porcupine Point		60 44 36	146 42 06	Entire Site
123	С	Fidalgo Bay		60 48 00	146 30 00	Entire Site
124	С	Beartrap Bay 1		60 45 20	146 04 00	Bay Mouth
		Beartrap Bay 2		60 44 12	146 05 12	Islets 1 Mi. South Of Bay
125	С	Upper Sheep Bay		60 41 12	145 56 54	Entire Site
126	С	Port Etches 1		60 19 05	146 35 00	South Shoreline At Etches Creek
******		Port Etches 2		60 17 52	146 38 23	Inlet 1 Mi. East Of English Bay

\*NUMBER

N = highest average count for 1988 - 1992 molting or pupping surveys-----Sites 3-16, 51-56, and 61-65

N = highest average count for 1991 - 1992 molting surveys------Sites 17-21, 27-43, and 46-50

N = maximum counts during 24 - 29 August 1991 surveys (molting)-----Sites 68-71

N = highest recorded count------For other sites

\* TYPE:

- A. Significant site;10 or more animals present
- B. Minor site; usually fewer than 10 animals
- C. Historically used site or current use unknown

Site	Type*	Site Name	Lat./Long. <sup>1</sup>	Other Information
1	В	Middleton Island	59 28 19 N/ 146 18 22 W	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward
2	В	Hook Point	60 20 12 / 146 15 29	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward, 100 animals observed
3	C	Cape Hinchinbrook	60 14 00 / 146 38 09	100 □animals observed
4	А	Seal Rocks	60 10 00 / 146 50 00	Designated Critical Habitat: Rookery, 3000 ft. vertical and landward, 20 nm seaward, 500 □pups observed
5	Α	Wooded Islands	59 52 55 / 147 20 44	Designated Critical Habitat: Rookery, 3000 ft. vertical and landward, 20 nm seaward, 600 □pups observed
6	В	The Needle	60 06 41 / 147 36 03	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward
7	В	Point Elrington	59 56 00 / 148 13 30	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward
8	С	Pleiades Island	60 14 25 / 148 00 30	Haulout site used during late winter/early spring, 100 ☐ animals have been observed on the site
9	В	Perry Island	60 43 32 / 147 53 15	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward
10	С	Glacier Island	60 51 14 / 147 08 29	326 animals sited 8/25/93
11	В	Point Eleanor	60 35 00 / 147 34 00	Designated Critical Habitat: Haulout, 3000 ft. vertical and landward, 20 nm seaward

<sup>&</sup>lt;sup>1</sup> The latitude and longitude descriptions may differ from some National Marine Fisheries Service publications. The changes were made to more accurately identify the location of the polygons depicted on the accompanying map.

- A. Rookery: Designated Critical Habitat under the Endangered Species Act
- B. Haulout: Designated Critical Habitat under the Endangered Species Act
- C. Haulouts

<sup>\*</sup> TYPE:

## 4650 - Fate of Spilled Oil

Weathering is a combination of chemical and physical processes that change the physical properties and composition of spilled oil. These processes include evaporation, oxidation, biodegradation, emulsification, dispersion, dissolution, and sedimentation. Below are definitions of these processes and how they relate to oil spills.

- Evaporation occurs when substances are converted from liquid state to vapor. During an oil spill, lighter components can evaporate into the atmosphere, leaving behind heavier components. Evaporation rates depend on the composition of the oil and environmental factors like wind, waves, temperature, currents, etc. For example, lighter refined products, such as gasoline, tend to evaporate very quickly because they have a higher proportion of lighter compounds. Heavier oils, like bunker oil, contain relatively few light compounds and leave viscous residues, composed of heavier compounds.
- Oxidation is a chemical reaction between two substances, which results in loss of electrons from one
  of the substances. This chemical reaction can take place between spilled oil and oxygen in the air or
  water. This reaction can produce water soluble compounds that can dissolve or form persistent
  compounds call tars. Oxidation of oil is a very slow process but can be enhanced by sunlight.
- **Biodegradation** occurs when microorganisms, such as bacteria, fungi, and yeast, break down a substance by feeding on it. Seawater contains a range of microorganisms that can either partially or completely degrade oil. Nutrient levels, water temperature and oxygen availability can all affect biodegradation, which tends to be quicker in warmer environments.
- **Emulsification** is a process where small droplets of one liquid become suspended in another liquid. During a spill, emulsification takes place when strong currents or waves suspend water droplets in oil. Water-in-oil emulsions are frequently called "mousse" and are more persistent than the original oil.
- Dispersion is the break up and diffusion of substances from their original source. In an oil spill, turbulent seas can break oil into various sized droplets and mix them into the water column. Smaller droplets can stay suspended while larger droplets tend to resurface, creating a secondary slick. The amount of oil dispersed depends on the oil's chemical and physical properties and the sea state. For example, lower viscosity oils such as diesel, have higher dispersion rates in rough seas. Chemical dispersants may be used to enhance dispersion.
- **Dissolution** is the process of dissolving one substance in another. Many oils contain light aromatic hydrocarbons, like benzene and toluene, which are water soluble. During a spill, these compounds readily dissolve in water or evaporation into air, which is faster than dissolution.
- Sedimentation is a process where spilled oil chemically binds with, or adheres to, particulates in the
  water column, creating a density greater than the original oil. If the density of oil/particulate
  compounds becomes greater than water, particles will settle out of the water column. Sedimentation
  is much more common in shallow, nearshore areas because of the greater amount of suspended
  particulates.

#### **4700 – TECHNICAL SUPPORT**

## <u>4710 – Hazardous Materials-TBD</u>

4710.1 – Toxicologist

4710.2 - Product Specialist

4710.3 - Certified Marine Chemist

4710.4 – Certified Industrial Hygienist

4710.5 – Chemist or Chemical Engineer

#### 4710.6 – Sampling

Reference ADEC's Prevention Preparedness and Response webpage for detailed information on water quality sampling methods and procedures to determine the presence/absence of oil contamination that could potentially impact the commercial fisheries of Alaska <u>via the Alaska Commercial Fisheries Water Quality Sampling Methods & Procedures Manual</u>.

# 4720 - Oil

## 4720.1 – Scientific Support Coordinator

NOAA Scientific Support Coordinators (SSC) are the principal advisors to the USCG FOSC for scientific issues, communication with the scientific community, and coordination of requests for assistance from State and federal agencies regarding scientific studies. The SSC strives for a consensus on scientific issues affecting the response, but ensures that differing opinions are communicated to the FOSC. At the request of the FOSC, the SSC leads the scientific team during a response and is responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. The SSC leads the synthesis and integration of environmental information required for spill response decisions in support of the FOSC, while coordinating with State representatives, appropriate trustees and other knowledgeable local representatives. The SSC is supported by a scientific support team that includes expertise in environmental chemistry, oil slick tracking, pollutant transport modeling, natural resources at risk, environmental tradeoffs of countermeasures and cleanup, and information management. At the request of the FOSC, the NOAA SSC may facilitate the FOSC's work with the lead administrative trustee for natural resources to ensure coordination between damage assessment data collection efforts and data collected in support of response operations.

4720.2 – Shoreline Cleanup Assessment - TBD 4720.3 – Special Monitoring of Applied Response Technologies (SMART) - TBD

# 4720.4 - Dredging

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

4720.5 – Deepwater Removal 4720.6 – Heavy Lift

## <u>4730 – General</u>

# 4730.1 – Cultural & Historic Properties

Guidance for how to ensure that preparedness and emergency response activities take historic properties protection into account is provided in the *Alaska Implementation Guidelines for Federal On-Scene Coordinators for the Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Pollution Contingency Plan (Guidelines)*. For example, Attachment 5 of the *Guidelines* provides information to Federal On-Scene Coordinators (FOSCs) to help them determine when historic properties need to be considered following an oil discharge or hazardous substance release, and when to activate an Historic Properties Specialist. The *Guidelines*, which will be included in the RCP, are available on the Alaska RRT website at: <a href="http://www.akrrt.org/AK IPG.pdf">http://www.akrrt.org/AK IPG.pdf</a>.

## Questions about historic properties preparedness and response activities should be directed to:

Alaska Office of History and Archaeology.......269-8721

4730.2 – Legal - TBD 4730.3 – Chaplain - TBD 4730.4 – Public Health - TBD 4730.5 – Human Resources - TBD 4730.6 – Critical Incident Stress Management - TBD

# 4740 - Law Enforcement

Reference the Community Profiles.

# 4750 - Search and Rescue (SAR) - TBD

# <u>4760 – Marine Fire</u>

Reference the Salvage and Marine Fire Fighting Plan, <u>Section 8100</u>.

#### 4800 - REQUIRED CORRESPONDENCE, PERMITS & CONSULTATION

#### 4810 - Administrative Orders

Per the USCG Marine Environmental Response and Preparedness Manual, "[a]n Administrative Order is a compliance tool available to the FOSC to remove an oil discharge or hazardous substance release or prevent the substantial threat of a discharge or release within the Coastal Zone. Administrative Orders can be used to direct the Responsible Party to take appropriate action to mitigate the threat to public health, welfare, or environment.

FOSCs may issue Administrative Orders to the Responsible Party to prevent a substantial threat of a discharge or release and ensure the effective and immediate removal of an oil or FWPCA hazardous substance. Administrative Orders should be used prior to issuing a Notice of Federal Assumption and assuming control of the response. The FOSC must make a determination of an imminent and substantial threat to the public health, welfare, or the environment of the United States prior to using an FWPCA Administrative Order."

#### 4820 - Notice of Federal Interest

The FOSC is required to inform the responsible party (RP) of the U.S. Government's legal requirements when a pollution incident occurs. This function is achieved by issuing a "Notice of Federal Interest" to any and all suspected responsible parties. The U.S. Government's role in an incident is primarily oversight unless the RP fails to take adequate removal action.

## 4830 - Notice of Federal Assumption

The FOSC is required to notify the RP if their actions to abate the threat and remove a hazardous substance are unsatisfactory. The FOSC then assumes response management, and the RP is liable for costs incurred by the federal government. The document by which this is communicated is called a "Notice of Federal Assumption."

# 4840 - Letter of Designation

The FOSC is responsible for notifying the NPFC of the source of an actual of potential discharge. The NPFC must also be notified if the source is not identified. Notification may be made by letter, rapidraft, or message. The NPFC should be contacted for procedural guidance and with any questions. Further information on "designation of source" can be found at the <a href="National Pollution Fund Center">National Pollution Fund Center (NPFC)</a> website.

#### 4850 - Permits

This section contains a list of the various permits that could be required during oil or hazardous substance response and recovery. The Alaska Oil Spill Permits Project (AOSPP) workgroup developed a Permit Tool, which contains electronic versions of permits that may be required by State and federal agencies, listed below. It allows users to create a file with incident-specific information and exports that information into each permit form using the Adobe Acrobat® forms function. The Permit Tool also provides an example of a completed version of each form for a hypothetical incident.

If an incident occurs within the boundaries of a municipality, additional municipal permits may be required. Appropriate local government officials should be contacted to determine local permitting requirements. Some forms, authorizations, and instructions in the Permit Tool are not required by regulation, but are recommended formats for particular response activities.

<u>Alaska Spill Response Permits Tool</u> is available on ADEC's Prevention Preparedness and Response web page.

Permits can be accessed within the Permit Tool either by the agency that requires the permit or by response activity type.

**NOTE:** None of the permit applications that appear on ADEC's website will cover permission granted by ADF&G to haze wildlife. This activity requires that an applicant contact ADF&G directly to obtain a hazing permit.

For the most current version of the following ADF&G permits, please Reference the website provided.

# Mammal, Bird & Reptile Permits:

http://www.adfg.alaska.gov/index.cfm?adfg=otherlicense.collection http://www.adfg.alaska.gov/index.cfm?adfg=otherlicense.wildlife overview

Fish Resource Permit application: <a href="http://www.adfg.alaska.gov/index.cfm?adfg=fishingCommercial.main">http://www.adfg.alaska.gov/index.cfm?adfg=fishingCommercial.main</a>

# Fish, Amphibian, & Aquatic Plants Permits:

http://www.adfg.alaska.gov/index.cfm?adfg=otherlicense.aquatic resource

# Special Area Permit application:

http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.mainhttp://www.adfg.alaska.gov/static/license/uselicense/pdfs/specareapermit.pdf

Fish Habitat Permit application:

 $\frac{http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.mainhttp://www.adfg.alaska.gov/static/license/uselicense/pdfs/fhpermitapp.pdf}{} \\$ 

The following table contains a master list of permits, authorizations, forms, and instructions in the Permit Tool.

<b>6</b>					Resp	onse Activ	ities			
Permit, Authorization, Form, or Instruction	Agency	Historic Properties Protection	Notification & Reporting	Land Access	Non-mechanical Response	Logistics	Waste Management	Mechanical Response	Wildlife Response	Places of Refuge
Decanting Plan Information	ADEC				Χ		Χ	Χ		
Oil and Hazardous Materials Incident Final Report	ADEC		Χ							
Food Service Permit for >10 people	ADEC					Χ				
Food Service Permit for <10 People	ADEC					Χ				
In-Situ Burn Guidelines	ADEC				Χ		Χ			
Open Burn Application	ADEC						Χ			
Oil and Hazardous Substance Spill Notification Form	ADEC		Χ							
Scientific and Educational Permit (birds and mammals)	ADF&G								Χ	
Scientific and Educational Permit (fish)	ADF&G								Χ	
Title 16 Special Area Permit	ADF&G			Χ				Χ	Χ	
Title 16 Fish Habitat Permit	ADF&G							Χ	Χ	
Land Use Permit (Upland & Tidelands)	ADNR			Χ						
Alaska Coastal Management Program, Coastal Project Questionnaire	ADNR							Χ		
Burning Permit (Forestry)	ADNR					Χ	Χ	Χ		
Alaska Field Archaeology Permit	ADNR	Χ								
Special Park Use Permit	ADNR			Χ						
Temporary Water Use Permit (fresh water only)	ADNR							Χ		
Driveway/Approach Road Permit	ADOT					Χ				
Lane Closure Permit	ADOT					Χ				
Permit for Oversize Vehicle	ADOT					Χ				

<b>5</b>					Resp	onse Activ	ities			
Permit, Authorization, Form, or Instruction	Agency	Historic Properties Protection	Notification & Reporting	Land Access	Non-mechanical Response	Logistics	Waste Management	Mechanical Response	Wildlife Response	Places of Refuge
Permit for Oversize/Overweight Vehicles with Bridge Condition Attachment	ADOT					Χ				
In-situ Burn Application	ARRT				Χ					
Oil Spill Response Checklist: Wildlife Capture, Transportation, Stabilization & Treatment	ARRT								Χ	
Oil Spill Response Checklist: Wildlife Hazing	ARRT								Χ	
Dispersant Use Application - General Information	ARRT				Χ					
Dispersant Use Application - Zone 1	ARRT				Χ					
Dispersant Use Application - Zone 2/3	ARRT				Χ					
Places of Refuge Guidelines	ARRT									Χ
Permit to Discharge Pollutants into Surface Waters (NPDES)	EPA						Χ			
Marine Mammal Protection Act Instructions	NMFS								Χ	
NMFS Endangered Species Act Permits	NMFS								Χ	
Decanting Plan	UC				Χ		Χ	Χ		
Decontamination Plan	UC				Χ		Χ	Χ		
Health and Safety Plan	UC				Χ			Χ		
Recovered Oil Plan	UC				Χ		Χ	Χ		
Waste Management Plan	UC				Χ		Χ	Χ		
Nationwide Permit 20: Oil Spill Recovery Conditions	USACE				Χ	Χ		Χ		
National Response Center Report	USCG		Χ				Χ			
Local Notice to Mariners	USCG		Χ			Χ				
Report of Marine Accident, Injury, or Death	USCG		Χ							

ō					Resp	onse Activ	ities			
Permit, Authorization, Form, or Instruction	Agency	Historic Properties Protection	Notification & Reporting	Land Access	Non-mechanical Response	Logistics	Waste Management	Mechanical Response	Wildlife Response	Places of Refuge
Special Use Permit for National Forest System	USDA-FS			Χ						
Archaeological Investigations Permit	DOI	Χ								
Access to Federal Lands managed by DOI	DOI			Х						
(other than National Park System Units or National Wildlife Refuges)										
CITES/ESA Take Permit	DOI-FWS								Χ	
Endangered Species Act Permits	DOI-FWS							-	Χ	
Marine Mammal Protection Act Permit	DOI-FWS							-	Χ	
Bald and Golden Eagle Protection Act Collection Permit	DOI-FWS								Χ	
Migratory Bird Treaty Act Collection Permit	DOI-FWS								Χ	
Migratory Bird Treaty Act Rehabilitation Permit	DOI-FWS								Χ	
Migratory Bird Treaty Act Special Purpose Salvage Permit	DOI-FWS								Χ	
DOI-Fish and Wildlife Service Special Use Permit	DOI-FWS			Х						
DOI-National Park Service Special Use Permit	DOI-NPS			Χ						
Notice to Airman Request	USDOT/FAA		Χ			Χ				
Land Access – Municipal Lands	Varies			Χ						
Land Access – Private Lands	Varies			Х						
Land Access – Native Corporation Lands	Varies			Χ						
Land Access – Unknown Ownership	Varies			Χ						

# 4850.1 - Oiled or Potentially-Oiled Wildlife

Guidance for determining how to deal with oiled or potentially-oiled wildlife is found in the RCP, Wildlife Protection Guidelines for Alaska (Guidelines). For example, the Guidelines include contact information for wildlife resource agencies by wildlife species (Appendix 26); information on factors that need to be considered when determining when to begin and end a wildlife capture and treatment program (Appendix 1); permits and/or authorization required for wildlife response activities (Appendix 16); entities in Alaska with equipment and materials stockpiled for wildlife response activities (Appendix 21); and checklists for requesting authorization to conduct wildlife deterrence and/or wildlife capture, stabilization, transportation, and treatment (Appendices 24 and 25).

# Questions regarding oiled or potentially-oiled wildlife preparedness and response activities should be directed to:

U.S. Department of the Interior-Office of	271-5011
Environmental Policy and Compliance	
U.S. Department of Commerce-National MarineFisheries Service	271-5006
Alaska Department of Fish and Game	267-2342

## 4860 – ESA Consultations

Endangered Species Act (ESA) Consultation Guidance can be found at the following websites:

• U.S. Fish and Wildlife Service:

https://www.fws.gov/alaska/fisheries/fieldoffice/anchorage/endangered/consultation.htm

• National Marine Fisheries Service: <a href="https://alaskafisheries.noaa.gov/pr/esa-consultations">https://alaskafisheries.noaa.gov/pr/esa-consultations</a>

## 4870 - Disposal

The responsible party will be responsible for developing a waste disposal plan to provide the necessary logistical and procedural information required to ensure fast and efficient transfer of wastes from the response operations personnel to disposal facilities in compliance with existing laws and regulations. Oversight of the waste disposal plan will normally be the responsibility of the State.

Currently, no approved hazardous waste disposal sites exist in Alaska. Municipal landfills in Alaska either no longer accept oily wastes or accept only lightly oiled soils. An ADEC solid waste permit is required; consult with ADEC on the landfill status. ADEC Anchorage can provide current information on the adequacy of landfills in the PWS Area. Reference Section 3240 of this document for disposal instructions and resources.

# 4880 - Dredging - TBD

## 4890 – Decanting

Reference Section 4850 for permitting instructions.

4900 – Reserved for Area/District

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#### 5100 - LOGISTICS SECTION ORGANIZATION

The following are helpful resources for establishing a case specific logistics section organization:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response.

Note: None of these are specifically prescribed by this plan, and none are mandated for use by response plan holders or potential responsible parties. Federal and State On-Scene Coordinators will work with the response organization established by the responsible party in responding to and managing oil or hazardous substance releases as long as their organization is compatible with ICS principles

## **5200 - SUPPORT**

Listings of some logistical support facilities and services in communities within the region are included at the end of this part. Generally, support facilities and services will be limited in nearly all locations. The deployment of these limited resources will be further dependent upon the season; for instance, response entities will have to face the flood of tourists that arrive in early May and remain through August. Additionally, some services and facilities do not operate during the winter months. The Alaska Wilderness Milepost contains valuable information and can be consulted for more in-depth information.

Communities in the northern portion of the Prince William Sound (PWS) Area are, for the most part, connected by the region's road network (e.g. Valdez, Glennallen, Copper Center, Gakona, etc.). However, this network does not provide access to the coastal areas of PWS except at Valdez and Whittier (railroad access is also available at Whittier). Communities on the road system may realize a more rapid transport and staging of equipment and personnel resources to their areas than can be expected by coastal communities. For coastal spills, resources existing within the region will be moved to the staging location by road/air/railroad and then transferred to vessels for deployment to the specific spill location. Resources secured from locations outside the Prince William Sound Area can be expected to arrive initially by air, sea, road, or rail and then transferred to the staging locations by the most appropriate means available.

# 5210 - Supply

5210.1 - Federal

5210.1.1 - EPA

The **U.S. Environmental Protection Agency** incident response equipment is based out of the EPA Emergency Response Warehouse in Anchorage, AK. Additional equipment in Region 10 is also located in Seattle, Washington and Portland, Oregon. Equipment maintained at the Anchorage Emergency Response Warehouse consists of the following:

- Monitoring equipment for multiple hazardous materials and chemicals;
- Sampling equipment;
- Level A & B response gear and PPE;
- Personnel Decontamination equipment;
- Minor containment and clean-up equipment;
- Mobile command post trailer with satellite communication capability, including a T-1 internet connection;
- Response trucks; two equipment trailers, and an all-terrain vehicle with equipment bed; and
- Gasoline and diesel generators for remote power.

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#### 5210.1.2 - USCG

The **USCG** maintains twenty pre-positioned oil pollution response equipment depots in Alaska. Locations of these depots are Ketchikan, Sitka, Juneau, Petersburg, Valdez, Cordova, Anchorage, Kenai, Seward, Homer, Kodiak, Attu, King Cove, Whittier, Port Graham, St George, St Paul and Dutch Harbor. Except for Anchorage, the basic equipment package consists of harbor boom (mainly Kepner Sea Curtain), anchor/towing support, various sorbents, generators, emergency lights, and limited personnel protection equipment. In Anchorage, one vessel of opportunity skimming system (VOSS) and 5,000 ft. of offshore boom (seas to 4 ft.) are pre-positioned on four flatbed trailers for quick transport to the scene. The equipment is located at Fort Richardson. A response trailer with sorbent materials is maintained at Seward. Contact the FOSC or the Supervisor of the District Response Team (DRAT) for access to the pre-positioned equipment. For additional details regarding USCG District 17 DRAT resources, visit the following website: http://www.uscg.mil/d17/d17response/drat/dratpage.asp

At Ft. Richardson, the USCG VOSS and 5,000 feet of ocean boom are located in Building 800. The equipment is staged on flatbed trailers for quick response. This building is also the main warehouse for response equipment maintained by the Navy Supervisor of Salvage (NAVSUPSALV) ESSM Base Anchorage. In the event of an oil spill, this equipment is available for mobilization at the request of the FOSC. Under most circumstances, mobilization support will be coordinated by NAVSUPSALV ESSM Base Anchorage personnel. In the event that NAVSUPSALV cannot assist, an Interagency Support Agreement (ISA) is in place between the US Army and the USCG. The ISA provides authority for the US Army to arrange for immediate transportation requirements, and provides funding reimbursement, normally through the Oil Spill Liability Trust Fund by means of a Federal Pollution Number for a particular event.

#### Oil Spill Response Equipment Notification/Mobilization:

During normal duty hours, notification of personnel and mobilization of equipment will be as follows: FOSC authorizes mobilization of USCG equipment. FOSC representative or USCG D17 (DRAT) will coordinate with NAVSUPSALV (907 384-2968) to prepare the loads for transport, and arrange for commercial transport to the site or the load-out area. A Pollution Fund Authorization form will be required for NAVSUPSALV support.

In the event NAVSUPSALV is unavailable, USCG will notify DOD (ALCOM) and the Ft Richardson Command Operations Center (COC) of an oil spill, specify the support required, and pass along the name and telephone number of the USCG point of contact. The Ft Richardson COC has procedures in place to alert the Director of Logistics, Plans and Operations Division (907 384-2212), and to arrange for 24-hour vehicular support (907 384-6666).

**During Other-Than Normal Duty Hours:** The USCG will notify the 24- hour NAVSUPSALV duty officer (907 229-8859) and request support. If NAVSUPSALV is unavailable, USCG will notify ALCOM and request assistance to mobilize the VOSS and other pre-staged response equipment from Bldg. 800, Ft. Richardson. ALCOM will coordinate with the Ft. Richardson Command Operations Center to provide necessary support.

Designated individuals within the framework of this agreement will be given emergency contact procedures to use in contacting the USCG personnel involved in this process. Upon notification that emergency support is requested, NAVSUPSALV or US Army personnel should contact the USCG to determine the equipment destinations and specific time schedules.

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Questions concerning these procedures or the USCG's emergency response equipment should be directed to USCG D17 (DRAT) at (907) 463-2807/2806/2804.

The USCG operates vessels and aircraft that may be available for use in pollution response. The type and location of these assets are as follows:

- 1. Five HH-C-130H Hercules fixed wing aircraft. A long-range workhorse with 14 hours endurance and cruise speed of 290 knots. Cargo space is limited to 2,870 cubic feet with no passengers. Cargo space dimensions are 10 ft. (width) x 26 ft. (length) or 41 feet from ramp with Search and Rescue (SAR) bin removed x 9 ft. (height). Size of loading hatch is 7'-6" high x 9'-11" wide. Under normal operation conditions with a standard fuel load, the maximum allowable loading including passengers is 50,000 lbs.
- 2. Four HH-60J Jayhawk helicopters. A medium range recovery helicopter with 6 hours endurance and cruise speed of 135 knots. The cargo space is approximately 300 cubic feet. Under normal operating conditions with a standard fuel load, the maximum allowable loading, including passengers is about 2000 lbs. This aircraft is equipped with a hoist having a 600 lb. capacity and an external sling whose capacity is rated at 6,000 lbs.; however, the total weight of fuel and other cargo may limit the lifting capacity of the helicopter.
- 3. Short-range recovery helicopter with 3.5 hours endurance and 125-knot cruise speed.

USCG Aviation Support Facility Cordova (AVSUPFAC Cordova). This facility may be reached at (907) 424-7346.

<u>Air Station Sitka:</u> Three HH60J Jayhawk helicopters. A medium range recovery helicopter with 6 hours duration and 135-knot cruise speed.

WLBs are 225 ft. in length, with a maximum speed of 15 knots, and a maximum range of 6000 nautical miles. WLM is 175 ft. in length with a maximum speed of 13 knots. Four WLBs and one WLM are home ported in Alaska.

- CGC SPAR (WLB 206): Kodiak, Alaska
- CGC HICKORY (WLB 212): Homer, Alaska
- CGC SYCAMORE (WLB 209): Cordova, Alaska
- CGC MAPLE (WLB 207): Sitka, Alaska
- CGC ATHONY PETIT (WLM 558): Ketchikan, Alaska

In addition, all four of the WLB's carry two SORS (Spilled Oil Recovery System) on board. Each system consists of an outrigger assembly, a fast sweep boom, a Desmi Terminator Weir Skimmer, a control stand, and two Canflex Sea Slug floating storage bladders (12,500 gal capacity and 26,400 gal capacity).

<u>High Endurance Cutters (WHEC)</u>: WHECs are 378 feet in length, with a maximum speed of 29.0 knots and a maximum range of 14,000 miles. Although no WHECs are home ported in Alaska, a WHEC is usually on patrol in Alaskan waters.

<u>Medium Endurance Cutters (WMEC):</u> WMECs are 213 to 283 feet in length. The CGC ALEX HALEY is the largest WMEC in the USCG fleet. Their maximum speed ranges from 14 to 19.5 knots and maximum range can approach 22,000 miles. The Register of Cutters of USCG contains vessel specific information on an individual cutter's performance. Two WMECs are home ported in Alaska:

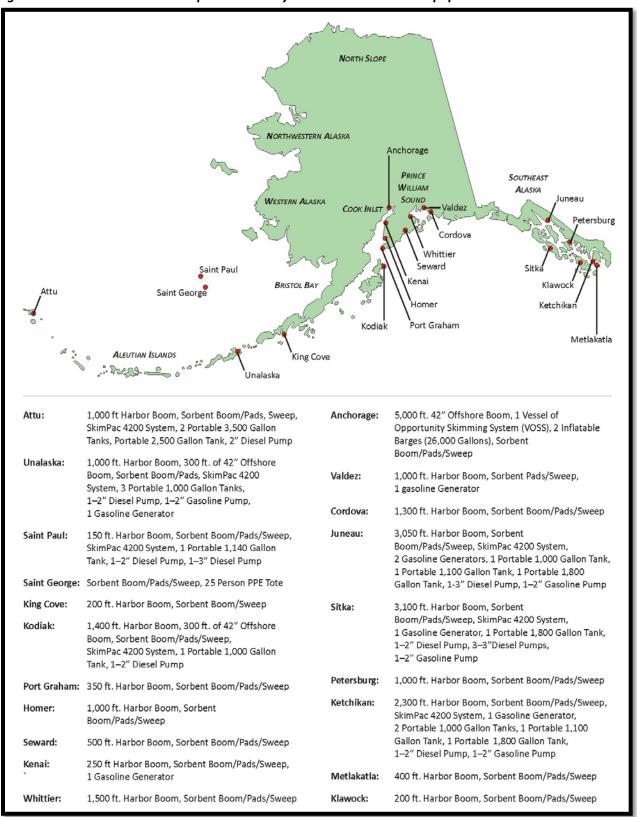
- 1. CGC MUNRO(WHEC 724): Kodiak, Alaska
- 2. CGC ALEX HALEY (WMEC 39): Kodiak, Alaska

<u>Patrol Boats (WPB)/Patrol Cutter (WPC):</u> WPBs are 110 feet in length with a maximum speed of 30 knots, and a maximum range of 1,800 miles. Five WPBs are home ported in the following locations. One WPC (154 feet in length, max speed of 28 knots, and a max range of 2,500 nautical miles) is homeported in Ketchikan Alaska:

- 1. CGC MUSTANG (WPB 1310): Seward, Alaska
- 2. CGC LIBERTY (WPB 1334): Juneau, Alaska
- 3. CGC ANACAPA (WPB 1335): Petersburg, Alaska
- 4. CGC NASHON (WPB 1311): Homer, Alaska
- 5. CGC CHANDELEUR (WPB 1319): Valdez, Alaska
- 6. USCGC JOHN MCCORMICK (WPC-1121): Ketchikan Alaska

<u>Inland Buoy Tenders (WLI):</u> The only WLI in Alaska, CGC ELDERBERRY, is home ported in Petersburg. It is 65 ft. in length, has a maximum speed of 10 knots, and a maximum range of 2,000 miles.

Figure 5-1: USCG D17 District Response Advisory Team Per-Positioned Equipment Location



#### 5210.1.3 - DOD

The **Department of Defense (DOD)** 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 might be locally available. Requests for DOD support shall be made through the RRT.

All request for DOD assets shall be made through the FOSC. The FOSC will forward the request to the USCG D17 Command Center, who will liaison with ALCOM. Funding for all DOD assets will be provided through the OSLTF. If DOD assets are employed in a response, representatives from DOD shall be included in the incident command structure. Actual availability of equipment will depend on contractual arrangements and agreements between the party owning the equipment and the party desiring to purchase or use the equipment. No prior permission or arrangement for the use of this equipment is implied or granted by the inclusion of any organization's equipment, whether federal, state, local, or privately owned.

#### 5210.1.4 - NAVY SUPSALV

The **U.S. Navy, Supervisor of Salvage (NAVSUPSALV)** is the Federal agency most knowledgeable and experienced in ship salvage, shipboard damage control and diving. They also have extensive knowledge in oil spill response. They have equipment depots in Williamsburg, Virginia, Port Hueneme, California, Anchorage, Alaska, and Pearl Harbor, Hawaii. These depots have an extensive array of specialized equipment and personnel for use in oil spill response and ship salvage operations. Equipment is available to FOSC's, with operators and maintenance support, on a cost reimbursable basis. Requests for NAVSUPSALV support shall be made through the RRT. Contact (907) 384-2968 (Anchorage) or (703) 602-7527 (24-hour) for current inventories and equipment availability. Early alert "heads-up" calls are encouraged, appreciated, and invaluable even if the extent of the response has not been determined.

#### 5210.2 - State

Although emergency spill response equipment depots have not been established as required by law, the Alaska Department of Environmental Conservation (ADEC) has established nearshore response packages and pre-positioned spill response equipment caches as directed by the State legislature.

# 5210.2.1 – Term Contractors

ADEC maintains Term Contracts for emergency response to both oil and hazardous material spills. These contracts can be activated by the issuance of a *Notice to Proceed* by the Contract Manager or State On-Scene Coordinator.

#### ADEC CONTAMINATED SITES TERM CONTRACTORS

		Phone Numbers		
Contractor	Contact Name	Office	Fax	Address
AMEC Earth &	Keri DePalma	479-7586	479-0193	431 Old Steese Hwy, Suite
Environmental	Ken Deraima	475-7360	473-0133	200, Fairbanks, AK 99701
BGES	Robert Braunstein	696-2447	696-2439	P.O. Box 110126
BGES	Keith Guyer	090-2447	090-2439	Anchorage, AK 99511-0126
Bristol				2000 W International
Environmental &	Joe Terrell	563-0013	563-6713	Airport Rd, C-1
Engineering	Mike Torpy	303-0013	202-0/12	Anchorage, AK 99502-1116
Services Corp.				Alichorage, Ak 99302-1110

Carson Dorn	Tom Carson	586-4447	586-5917	712 West 12 <sup>th</sup> Street, Juneau, AK 99801
ChemTrack	Chuck Ronan	349-2511	522-3150	11711 S.Gambell St, Anchorage, AK 99515-3444
CH2Mhill	Don Turner	278-2551	257-2000	301 W. Northern Lights Blvd, Ste 601 Anchorage, AK 99503-2648
Ecology and Environment	Vivian Melde	257-5000	257-5007	3301 C Street, Suite 209, Anchorage, AK 99503
Emerald Alaska	Blake Hillis	258-1558	258-3049	2020 Viking Drive, Anchorage, AK 99501
Hart Crowser	James D. Gill	276-7475	276-2104	2550 Denali St, Suite 705, Anchorage, AK 99503
ICRC	William E. Humphries	694-4272	694-4271	11901 Business Blvd, Suite 202, Eagle River, AK 99577
Michael L. Foster & Associates	Michael L. Foster	696-6200	696-6202	13135 Old Glenn Hwy, Suite 210, Eagle River, AK 99577
Nortech	John	222-2445	222-0915	206 E Fireweed Lane, Suite 200, Anchorage, AK 99503
Nortech	Hargesheimer	452-5688	452-5694	2400 College Road, Fairbanks, AK 99709
Northwind Environmental	Kim Kearney	277-5488	277-5422	235 E 8 <sup>th</sup> Avenue, Suite 210, Anchorage, AK 99501
Oasis Environmental	Max Schwenne	258-4880	258-4033	807 G Street, Suite 250, Anchorage, AK 99501
Shannon & Wilson	Rohn Abbott	479-0600	479-5691	2055 Hill Road, Fairbanks, AK 99709
Stiatifion & Wilson	KOIIII ADDOLL	561-2120	561-4483	5430 Fairbanks St, Anchorage, AK 99518
SLR	Andrew Dimitriou	222-1112	222-1113	2525 Blueberry Road, Suite 206, Anchorage, AK 99503
URS	Paul Dworian	562-3366	562-9688	2700 Gambell St, Anchorage, AK 99503
R.F. Weston	Mark Goodwin	276-6610	276-6694	425 G Street, Suite 300, Anchorage, AK 99501

# ADEC OIL SPILL RESPONSE TERM CONTRACTORS

Contractor	Address	Phone/ Fax	Contact name & after-hours number
Carson Dorn	712 West 12 <sup>th</sup> Street Juneau AK 99801	586-4447 586-5917	Tom Carson Hm: 789-0034; Cell: 723-9769
Phillip Services	1813 E. 1 <sup>st</sup> Ave, # 101 Anchorage AK 99501	272-9007 272-6805	Tom Poliquin 227-1928 Cell
Pacific Environmental Corp. (PENCO)	6000 A Street Anchorage AK 99518	562-5420 562-5426	Rick Wilson 244-6069 Matt Melton

Contractor	Address	Phone/ Fax	Contact name & after-hours number
Shannon & Wilson	5430 Fairbanks St. # 3 Anchorage AK 99518 2055 Hill Road Fairbanks, AK 99709	561-2120 561-4483 479-0600 479-5691	242-2186 Stafford Glashon 441-6672 Matt Hemry 229-1064
Alaska Chadux Corporation	2347 Azurite Court Anchorage, AK 99507	346-2365 348-2330	24 Hr. # 348-2365 Bob Heavilin 529-2530
Ecology & Environment	3301 C Street, Suite 209 Anchorage AK 99503	257-5000 257-5007	Vivian Melde
BGES, Inc.	750 West 2 <sup>nd</sup> Ave. Anchorage, AK 99501	644-2900 644-2901 696-2437 696-2439	24 Hr. # 644-2900 Robert Braunstein Cell: 830-9560
Environmental Compliance Consultants	1500 Post Rd. Anchorage, AK 99501	644-0428 677-9328	24 Hr. # 751-4493 Ask for Mike Anderson
Nuka Research and Planning Group	P.O. Box 175 Seldovia, AK 99663	234-7821 399-3598	Tim Robertson 234-7821 Elise DeCola 508-454-4009
Emerald Alaska, Inc.	425 Outer Springer Loop Palmer, AK 99645	258-1558 746-3651	24 Hr. # 258-1558
Oasis Environmental	807 G. Street, Suite 250 Anchorage, AK 99501	258-4880 258-4033	Max Schwenne 694-7070
Aware Consulting	P.O. Box 526 Soldotna, AK 99669	260-2030 260-2035	Denise Newbould 262-8320 John Coston 283-8139 Rick Warren 262-4740
North Wind	235 East 8 <sup>th</sup> Ave. Suite 210 Anchorage, AK 99811	John Costello 277-5488 (W) 277-5422(F)	John Costello 360-5383 (C) 929-1071 (H)
Trident Services, Inc.	7926 Old Seward Highway Suite B-2 Anchorage, AK 99518	Mark Sienkiewicz President 929-9414 (W) 770-2986 (F)	Mark Sienkiewicz 929-9414
AHTNA Construction	240 East Tudor Rd.	John Wiese	John Wiese

Contractor	Address	Phone/ Fax	Contact name & after-hours number
	Suite 200	Operations	746-5383 (H)
	Anchorage, AK 99503	Manager	832-3371 (C)
		771-5311(W)	Sharon Sadlon
			745-4194 (H)
			227-4022 (C)
		Ryan Sharratt	
TC Enterprise Inc	P.O. Box 2338	Project Manager	Ryan Sharratt
TC Enterprise Inc.	Kodiak, AK 99615	486-3755(W)	486-3755
		486-5573 (F)	

# 5210.2.2 – Community Spill Response Agreements

ADEC has entered into formal community spill response agreements with several local communities for the purposes of oil and/or hazardous materials response. ADEC will reimburse the community for costs incurred in responding to the spill and any containment and recovery actions involved. These local response agreements are intended to maximize the use of existing local resources, provide proper reimbursement, and, where appropriate, provide training in the use of response equipment. Also, Reference the ADEC Call-out Directory (current edition) for the contact persons and telephone numbers for activating these response agreements.

#### *5210.2.3* – *State Ferries*

An important response asset is the State "response" ferry, which provides an expanded communications capability as well as an excellent platform to manage a significant spill response. Other State ferries may also be called upon in a major spill response to provide berthing and forward staging platforms for work crews. Other State vessels may be available from the Alaska Department of Fish and Game and the Alaska Department of Public Safety. Reference the Alaska Marine Highway System Vessel Information Table for further details.

ARCTIC OCEAN Chukchi Sea Medium ETS <50,000 DWT stored at the Larger ETS >50,000 DWT Gargo Building, Nome. with helicopter pendants and slings stored in the 2 x Larger ETS >50,000 DWT with USCG Air Station, Sitka. helicopter pendants and slings stored in the USCG Air Station, Kodiak. Nome Larger ETS >50,000 DWT Larger ETS >50,000 with helicopter pendants and **DWT** stored slings stored at the ADEC Medium ETS <50,000 Warehouse, Anchorage. at the USCG stored at the USCG Air Base. Facility, Cold Bay. Ketchikan. Medium ETS <50,000 nchorage DWT stored in connex Bering Sed on City Dock, Unalaska. Gulf Larger ETS >50,000 DWT with helicopter pendants of and slings stored in the City Alaska EMS Building, Adak. Ketchikan Cold Bay

5210.2.4 - Emergency Towing System (ETS)

Reference Section 8200 of this document for information on the Alaska Emergency Towing System.

Larger ETS >50,000 DWT with helicopter pendants and slings stored

in the ADOT Hangar, Unalaska.

PACIFIC

OCEAN

#### 5210.2.5 – Spill Response Containers

Unalaska

Adak

ADEC, as the State of Alaska's lead agency for responses to oil and hazardous substance spills, has developed a network of response equipment packages positioned in at-risk areas throughout the state. Many Alaskan communities are isolated from the larger population centers and the spill response equipment that is likely to be available there. To enhance the State's response capability and to assist these remote communities, ADEC has pre-staged across the state packages of spill response materials and equipment stored in steel containers of the "conex" type, which are air transportable. These local equipment response packages provide an immediate on-site response capability that can be accessed by trained personnel in a timely manner. Most of the packages are designed to assist in the initial response and cleanup of non-persistent oil spills in harbor areas. A map of response container locations and inventory information is available at the following link: <a href="http://dec.alaska.gov/spar/ppr/response-resources/local-response/">http://dec.alaska.gov/spar/ppr/response-resources/local-response/</a>

# 5210.2.6 – Alaska Department of Fish and Game (ADF&G) Vessels

These are ADF&G research vessels and may be out at sea on research missions most of the time, so their availability for spill response is limited.

Alaska Department Of Fish And Game  Vessel Information Table									
Home Port	R/V Medeia	R/V Kestrel	R/V Pandalus	R/V Resolution					
Home Port	Juneau	Petersburg	Homer	Kodiak					
Vessel Specs									
Length (feet)	110	106	65	81					
Beam (feet)	25	26	20	25					
Service Speed (SS) (knots)	9.5-10	10	9.5	10					
Fuel Consumption (GPH at SS)	50	N/A	19	17					
Fuel Storage Capacity	26,500	12,600	7,000	14,000					
Tankage aboard for servicing skiffs	None	None	Drums	1 Tank					
Clear Deck Space	40	24X30	20X35	20X40					
Crew	4	3	2-3	3					
Berthing (incl. crew)	16	13	7	10					
Galley and Food Service	Yes	Yes	Yes	Yes					
Compressed Air	Yes	Yes	Yes	Yes					
Satellite Communications	Yes	N/A	No	Yes					
SSB Radio	Yes		Yes	Yes					
Sonar	Side Scan	Side Scan	Side Scan	180 degree					
D-GPS	Yes	Yes	Yes	Yes					
Days at Sea (w/ full complement)	30+ days	20	30	30-40 days					
Onboard shop	Yes	Yes	Yes	Yes					
Daily Cost	\$3,800	\$3,600	\$2,500	\$3,100					

# 5210.3 - Industry

Five industry response cooperatives currently exist in the State to provide oil spill response capability for certain facilities located together in a specific region. Alaska Clean Seas serves the North Slope region; Cook Inlet Spill Prevention and Response Inc. (CISPRI) serves the Cook Inlet region; and Alaska Chadux Corp serves the non-crude industry.

Organization	Contact	Telephone	Number	Address	Fax
Organization	Name	Office	24-Hour	Address	Number
Alaska Clean Seas (ACS)	Operations Manager	659- 3202	659-2405	Pouch 340022 Prudhoe Bay, AK 99734-0022	659-2616
Cook Inlet Spill Prevention & Response (CISPRI)	Todd Paxton	776- 5129	776-5129	P.O. Box 7314 Mile 26.5 N. Spur Nikiski, AK 99635	776-2190
Alaska Chadux Corp.	Bob Heavilin	348- 2365	348-2365	2347 Azurite Court Anchorage, AK 99507	348-2330

# 5210.4 – Prince William Sound Equipment

This section highlights the major resources and quantities of response-related equipment that may be available for the Prince William Sound area. Summary information such as this will be valuable during spill response planning and especially during actual spill responses. The listing provides information on both local resources and those resources that may be available from outside the immediate area since a significant spill event would most likely require resources from other locations. For more detailed equipment inventories for the other regions of the state, consult the appropriate Area Contingency Plan (ACP) for the particular region.

Actual availability of equipment will depend upon contractual arrangements and agreements between the party owning the equipment and the party desiring to purchase or use the equipment. No prior permission or arrangement for the use of this equipment is implied or granted by the inclusion of any organization's equipment, whether federal, state, local, or privately owned. Equipment listings are as follows:

5210.4.1 - Commercially Available Equipment

#### **VESSELS**

			TUG INVE				
Locatio	Name	Operator	Contact	Phone	Horsepow	L/B/D/	Bert
n					er	(FT)	h
AK	Tug Sea	AMC		206-455-4474	2600	85	
	Hawk						
AK	Tug Agnes	Foss Launch	Bill	907-274-1577	3000	114/31/1	8
	Foss	& Barge	Madigan	(24hr)		5	
AK	Tug Drew	Foss Launch	Bill	907-274-1577	3000	120/34/1	8
	Foss	& Barge	Madigan	(24hr)		6	
AK	Tug Jeffrey	Foss Launch	Bill	907-274-1577	3000	114/31/1	8
	Foss	& Barge	Madigan	(24hr)		5	
AK	Tug Sidney	Foss Launch	Bill	907-274-1577	3000	120/34/1	8
	Foss	& Barge	Madigan	(24hr)		6	
AK	Tug Wendy	Foss Launch	Bill	907-274-1577	4000	117/34/1	8
	Foss	& Barge	Madigan	(24hr)		6	

	BARGE INVENTORY										
Location	Barge	Operator	Contact	Phone	Barge	L/B/D	Remarks				
	Name				Type						
Various	FOS 255	Foss Launch	Bill	907-274-	Petro-R	250/76/17	DC				
AK Areas		& Barge	Madigan	1577 (24hr)							
Various	FOS 256	Foss Launch	Bill	907-274-	Petro-R	250/76/17	DC				
AK Areas		& Barge	Madigan	1577 (24hr)							
Various	FOSS	Foss Launch	Bill	907-274-	Deck	343/76/18	FLF-A-				
AK Areas	343	& Barge	Madigan	1577 (24hr)			WD				
Various	FOSS	Foss Launch	Bill	907-274-	Deck	286/76/18	FLA				
AK Areas	286-1	& Barge	Madigan	1577 (24hr)							

	WORK BOAT INVENTORY											
Location	Vessel	Туре	Company	Contact	Phone	L/B/D	Horsepower					
	Name					(FT)						
Valdez		Landing	R & R Diving	Richard L.	907-835-	56						
		Craft	Services	Wade	4375							
Valdez		Work	R & R Diving	Richard L.	907-835-	22						
		Boat	Services	Wade	4375							
Valdez		Utility	R & R Diving	Richard L.	907-835-	32						
		Boat	Services	Wade	4375							

# **BOOM EQUIPMENT**

	BOOM INVENTORY										
Location	Location Owner Type/Size Length LBS/FT Design Use Contact Work 24-F										
			(FT)	EST.*			#				
Valdez	R&R	Harbor	500		Containment	Richard	835-				
	Diving	Boom				Wade	4375				
Valdez	R&R	Contractor	1000		Containment	Richard	835-				
	Diving	Boom				Wade	4375				

# **SKIMMERS**

	SKIMMER INVENTORY											
Location	Source	Contact	Phone	Туре	Qty.	Nameplate Capacity [BBL/HR]	20% Capacity Derated	12 HR Recovery Derated [BBLS[	24 HR Recovery Derated [BBLS]			

# **MISCELLANEOUS**

Category	Owner	Quantity	Description	Location

# **SPECIALTY EQUIPMENT**

Location	Owner	Type/Size of Item	Quantity	Contact	Work#	24 Hour #
Anchorage	Lynden Inc	12' Ore Containers	300	Dave Haugen	245-1544	
Anchorage	Lynden Inc	18' Ore Containers	88	Dave Haugen	245-1544	

**CAMP EQUIPMENT** 

Location	Owner	Type/Size of Item/Quantity	Contact Phone #
Anchorage	Bering Marine	Atco 10'x56' Units; Use-Offices, Sleepers, Storage, Lavatory/Shower: 90	277-9834 248-7646
Anchorage	Bering Marine	56 Man Atco Self Contained Camp w/7 Sleepers, 1 Kitchen/Diner, 1 Lavatory, Generator Van, Water & Sewage Treatment Plant	277-9834 248-7646
Anchorage	Bering Marine	24 Man Camp w/6 each Skid Mounted Units w/Lavatory, Kitchen/Diner, & Rec Room	277-9834 248-7646

The following highlights the significant items in the R & R Diving Services (Valdez) inventory. For specific questions regarding R & R Diving spill response equipment assets, contact Richard L. Wade at 835-4375.

VALDEZ EQUIPMENT		
Bayliner Contessa, 29 ft	01	
Landing Craft, 56 ft	01	
Monark Work Boat, 22 ft	01	
Salinger Rubber Boat, 18 ft	01	
Utility Boat, 32 ft	01	
Rubber raft, 10 ft	03	
Harbor boom, 500 ft	01	
Contractor boom, 1000 ft	01	
Sorbent boom		
Sorbent sweep		
Sorbent pads		
Tyvek suits		
Rubber boots & gloves		
Respirators		
Generator, 15 kW	01	
Generator, 5 kW	01	
Generator, 1000 kW	01	
Generator, 1200 kW	01	
Compressor, 8 CFM, 120 psi	01	
Compressor, 25 CFM	01	
Compressor, 10 CFM, 5000 psi	01	
Pumps		
Power washers	02	
Steam cleaners	03	
Heavy equipment		various, incl. loaders, dozers, graders, vacuum truck, etc.
Automobiles		various, incl. vans, pickups, motorhome

**Facility Equipment:** The Oil Pollution Act of 1990 (OPA 90) requires that all "designated waterfront facilities" and all mobile transfer operators submit a facility response plan to be reviewed and approved by the cognizant Captain of the Port. In Prince William Sound, all required facilities and mobile transfer operators have submitted the required plans. One aspect of these response plans is for the owner/operator to identify by contract or other approved means the equipment needed to cleanup to the maximum extent practicable their worst case discharge.

For a list of each facility's response equipment, refer to each facility response plan. Facilities for Prince William Sound are as follows:

- o Orca Oil Company Cordova
- Silver Bay Logging Company McLeod Harbor, Montague Island
- o TAPS/Alyeska Terminal Valdez
- Tesoro Alaska Valdez Terminal Valdez
- Valdez Fuel Company Valdez
- o Harbor Fuel Company Valdez
- o Peter Pan Seafood Valdez
- o Nautilus Seafood Valdez
- o Petrostar Refinery Valdez
- o Wolverine Gas Company Glennallen
- o Hub of Alaska Glennallen
- o Copper Valley Fuel Glennallen
- Service Oil and Gas Glennallen
- Gulkana Airport Service Company Glennallen

The equipment list and storage locations for oil spill response equipment for Alyeska and SERVS can be found in SERVS Technical Manual SV-140.

# 5210.4.2 - Non-Commercially Available Equipment

# 1. USCG MAINTAINED CONEX AND SPILL RESPONSE EQUIPMENT INVENTORY

For MSU Valdez-based equipment call 835-7228 (24-hour emergency contact: 835-7200).

For Sector Anchorage-based equipment call 271-6700/6721

Transport Options: No Government options generally available. Commercial trailer required to move the two 20' conex boxes

CONEXES AND OTHER EQUIPMENT					
Category	Owner	Quantity	Description	Location	
Boom	USCG	12 bales	Type 270	Cordova	
	USCG	1000	Sea Curtain Boom	Cordova	
	USCG	72 bales	Type 270	Valdez	
	USCG	1000	Sea Curtain Boom	Valdez	
	USCG	1000	Harbor Boom	Valdez	
	USCG	700	Offshore Boom	Valdez	
	USCG	650	Nearshore Boom	Valdez	
Anchors	USCG	8		Valdez	
	USCG	6		Cordova	
Sorbent Material	USCG	42 bales	Sorbent Pads, Type 151	Valdez	
	USCG	45 bales	Sorbent Sweep, Type 126	Valdez	
	USCG	10 rolls	Sorbent Roll, Type 100	Valdez	
	USCG	40 bales	Sorbent Pads, Type 151	Cordova	
Buoys	USCG	6		Valdez	
	USCG	6		Cordova	
Miscellaneous	USCG	Various	Bags, earth screws, polypro line	Valdez/Cordova	
PPE	USCG	Various	Raingear, gloves, suits, boots, hardhats	Valdez	

# **VESSEL OF OPPORTUNITY SKIMMING SYSTEMS**

VOSS PACKA	VOSS PACKAGE						
Location	Owner	Qty.	Description	Design Use	Contact	Work #	24- Hour #
Sector Anchorage	USCG	1	VSL of Opportunity Skimming System	Containment	Supervisor	271-6700	271- 6700
		2	Auger Screw Pump Weir Skimmer 180 GPM/300 GPM Desmi				
		2	45' Boom Outrigger: 3 Sections				
		1	FAST Sweep Reel Boom				
		2	Portable Davits				
		2	800 GPM Prime Mover				
		2	28,000 Gallon Inflatak	ole Barges	·		

Category	Quantity	Description	Location		
Additional Boom	5,000'	American Marine 42" Ocean Boom	Foam Filled: 500' per		
Additional Boom	5,000		Container		
Boom Containers	Boom Containers 10 ea. 8' x 8' x 8.5' Boom Containers		Aluminum w/ Fork Pockets		
boom containers	10 ea.	8 X 8 X 8.5 BOOTH COILLamers	and		
Flat Bed Trailers	4 ea.	1 ea. 48' Trailer & 3 ea. 42'			

Equipment Location: Bldg 800, Fort Richardson

Access: Contact Commanding Officer, Port Ops Officer, or DRAT

Transport Options: DRAT will coordinate with SUPSALV.

# ADEC Community Spill Response Agreements and Response Conex Inventory (see next page for locations and conex inventory)

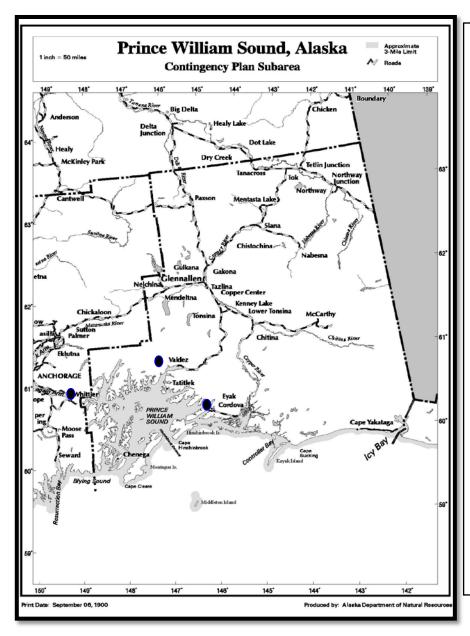
**Community Spill Response Agreements**: ADEC has entered into formal agreements with the following communities whereby the community may be requested to take initial response actions for spills in the local area (other than those caused by the community). ADEC will reimburse the community for costs incurred in responding to the spill and any containment and recovery actions involved.

City of Cordova

o City of Valdez

o City of Whittier

**Spill Response Conex:** ADEC also maintains a spill response conex in Anchorage. A summary map of response agreements and spill response conexes (with an equipment inventory) is provided on the following page.



# **ADEC Local Response Agreements Exist with:**

City of Cordova, City of Valdez, and City of Whittier

# **Typical ADEC Response Conex Inventory:**

Conexes located at Cordova, Valdez, and Whittier <a href="http://dec.alaska.gov/spar/perp/lra/conex">http://dec.alaska.gov/spar/perp/lra/conex</a> list.htm

DESCRIPTION	QTY	UNIT
85-gallong over-pack drums, packed with response supplies	3	ea
8"x12 Harbor boom, yellow, 100' lengths, marked ADEC	900	Ft
Tow bridles with floats, marked ADEC	2	ea
22 lb Danforth anchors	14	ea
10'x3/8" galvanized chain	10	Ea
5/8"x100' anchor and/or tow ropes	32	Ea
A-1 Flo, orage buoys, with 10' of 5/8" rope thru eye	28	Ea
3/8" line, 600' length	1	Roll
1 and ¼" O.D. x 5' galv. ground stakes	6	Ea
Sorbent boom	44	Bag
Sorbent pads	110	Bag
Sorbent roll (Type 100, 36" x 100")	10	Roll
Sorbent pad hand wringer	2	Ea
50' length oil snares (pom-poms on a rope)	12	Bag
85-gallon over-pack drums, yellow	10	Ea
Over-pack drum liners, 6-mil	1	Roll
ADEC fast response boom	300	ft
Poly sheeting (visquine)	5	Roll
Bulk lift bags (Supersacks)	4	Ea
20'x8'x8' steel container	1	ea

# **Coast Guard Spill Response Assets in PWS:**

Cordova: 1,300' harbor boom, sorbent boom/pads/sweeps Valdez: 1,300' harbor boom, sorbent boom/pads/sweeps

# 5210.4.3 - Industry Spill Cooperative Equipment

There are presently no industry spill response cooperatives located in Prince William Sound. However, Alaska Chadux Corporation (ACC) does serve members in the Prince William Sound area. The 24-hour phone is (cellular) 229-4474. The general office number is 278-3365. For a complete inventory of the equipment held, refer to the ACC Operations Manual.

The following highlights the significant items in the ACC inventory located in the Prince William Sound Area. Additional assets are staged in Anchorage and other locations. For specific questions regarding ACC spill response equipment assets, contact the ACC Logistics Manager at 348-2365.

#### **VALDEZ EQUIPMENT**

VDZ-01, 20 FT CONNEX, NO CHASSIS, RECOVERY		
Skimmer, Weir, Skim Pak	01	
Skimmer, Rope Mop, MW41G, diesel	01	
Skimmer, Rope Mop, MW41E, electric	01	
Mantaray skimmer head	02	
Trash Pump, Yanmar, 3 inch, diesel	03	
Trash Pump, Hatz, 4 inch, diesel	01	
Generator, 7.5 kW, diesel	01	
Fast Tanks, 2400 gallons	03	

VDZ-02, 20 FT CONNEX, NO CHASSIS, CONTAINMENT					
Boom, 24 inch	1000 ft				
Anchor System	01				
Bladder, 1250 gallon, Canflex, towable	01				

VDZ 03, 40 FT CONNEX, NO CHASSIS, CONTAINMENT	
Boom, 20 inch	2800 ft
Anchor System	03
P.P.E. Kit	01
Hose Kit, 2/25 ft suction, 4/50 ft discharge	01

YARD		
Boat, 18 ft	01	Boat # 3

# **CORDOVA Equipment**

CDV-01, 20 FT CONNEX, NO CHASSIS, RECOVERY					
Skimmer, Weir, Skim Pak	01				
Skimmer, Rope Mop, MW41G, diesel	01				
Skimmer, Rope Mop, MW41E, electric	01				
Trash pump, Yanmar, 3 inch	02				
Trash Pump, Yanmar, 4 inch	02				
Mantaray skimmer head	02				
Generator, 7.5 kW, diesel	01				
Hose Kit, 2/25 ft suction, 4/50 ft discharge	01				
Fast Tanks, 2400 gallons	03				
P.P.E. Kit	01				

Absorbent boom, 8 inch	18 bags	40 ft per bag
Absorbent boom, 6 inch	09 bags	40 ft per bag

CDV-02, 20 FT CONNEX, NO CHASSIS, CONTAINMENT						
Boom, 24 inch	1200 ft					
Bladder, 1250 gallon, Canflex, towable	01					
Anchor System	04					

CDV 03, 20 FT CONNEX, NO CHASSIS, CONTAINMENT						
Boom, 20 inch	2000 ft					

YARD		
Boat, 18 ft	01	Boat # 4

Several other out-of-region spill response cooperatives exist in Alaska and they present a valuable source of response equipment:

- Cook Inlet Spill Prevention and Response Inc. (CISPRI) is a Level E classified Oil Spill Response Organization serving the Cook Inlet region and located north of the town Kenai on the Kenai Peninsula, 180 highway miles south of Anchorage. The 24-hour phone is 776-5129.
- Alaska Clean Seas (ACS) is a North Slope cooperative headquartered in Prudhoe Bay. The 24-hour phone is 659-2405.
- Southeast Alaska Petroleum Resource Organization (SEAPRO) serves members in the Southeast Alaska area and is based out of Ketchikan. The 24-hour phone is 225-7002.

#### 5220 - Facilities

#### 5220.1 – Incident Command Post (ICP) Options

Regardless of the spill volume, the USCG or EPA FOSC and State SOSC will initially operate from their normal offices. Likewise, the resource agency representatives will operate from their normal work areas until adequate space is arranged, if needed. For significant spills, home offices may prove inadequate and a joint command center will be required. For a response by SERVS, expect to use the Valdez Emergency Operations Center (VEOC) at the SERVS facility in Valdez. Spills extending over a large area may require the establishment of auxiliary locations.

Other potential locations for command centers include the State Emergency Coordination Center (Camp Denali, Ft. Richardson), and RP facilities in Anchorage and Fairbanks.

In the event of a catastrophic spill event, the Unified Command may also consider relocating to Anchorage to take advantage of the existing infrastructure and expanded communications capabilities. Field command posts in downstream-impacted locations (e.g., southern Prince William Sound and the Western Gulf of Alaska) will also need to be considered.

**Procedures for Establishment**: For a federally funded response, the General Services Administration (GSA) and the Seventeenth Coast Guard District will locate and contract for the command center. For responsible party responses, the spiller/responder will be required to provide an adequate command center.

**Equipment**: The amount of equipment to outfit the command post will be determined by the size of the response. In general, the following will be required equipment for every command post (any items not already available will be leased or purchased locally):

- Telephones and phone books
- Copy and Facsimile machines
- Desktop and portable computers with printers and fax/modem capability
- Internet and email access
- Office furniture
- Portable radios and Marine communications base station
- Cameras and Video recording/playback capability
- Office supplies (pens, pencils, paper, etc.)
- Chart paper with easels and Status boards (dry-write)
- Overhead and slide projectors
- Environmental Sensitivity Index maps
- Most Environmentally Sensitive Area maps
- Copies of the RCP and PWS Area Contingency Plans
- Copies of the Alaska Incident Management System (AIMS) Guide
- Copies of the USCG Incident Management Handbook
- Copies of the Spill Tactics for Alaska Responders (STAR) Field Guide

#### 5220.2 - Berthing

Commercial lodging facilities are located in the major communities within the PWS Area - Cordova, Glennallen, Valdez, and Whittier. Alyeska maintains two man-camps in Valdez. During the summer tourist season, most lodging facilities, including recreational vehicle (RV) hookups, are booked at capacity and availability will be limited. Aside from these major towns in the region, most communities have very limited lodging facilities or no facilities at all. Some possible alternatives to traditional lodging may be the use of RVs, mobile homes, portable work camps/shelters, school gyms, Alaska National Guard Armories, etc. On-water berthing facilities for response personnel may be required. Chartered passenger vessels, constructed "hotel" barges, or U.S. Navy vessels could possibly fill the void in available berthing. All "berthing" type vessels must meet current Coast Guard licensing requirements.

#### 5220.4 - Port/Dock Facilities/Capacities

Any significant response effort will require large areas for equipment delivery, inventory, repair, and temporary storage. Small port facilities exist in Valdez and Cordova. Larger port facilities are available at Whittier and outside of the PWS Area in Anchorage and Seward. Anchorage has substantial warehousing and support facilities. See <a href="Community Profiles">Community Profiles</a> for resources available for potential staging areas.

# 5220.5 – Staging Areas

Staging areas for spill response are those locations where equipment from all sources is assembled and held pending deployment to the spill site. Ideally, staging areas should be large enough for interim storage of all equipment, and in close proximity to the spill site to minimize transit time for equipment to the scene. During prolonged spill control operations, equipment maintenance may be accomplished in the staging areas, and staging areas may likely have to be away from the water.

Reference the Community Profiles for community specific staging area options, as available.

#### 5220.6 – Security Providers

Reference the Community Profiles for community specific law enforcement details, as available.

#### 5220.7 – Airports/Heliports

The PWS Area has a number of small airstrips in addition to the two large ones at the airports in Cordova and Valdez. Part Three, subpart A, of this section contains information on airstrips within the region. Specific information regarding airport facilities and services is contained in the Alaska Supplement, Flight Information Publication (FLIP). Consult the current FLIP document to ascertain the availability of services and suitability of the runway to the type of aircraft.

# 5220.8 – Temporary Storage and Disposal Facilities (TSDs)

Reference the <u>Community Profiles</u> for community specific storage/disposal details, as available.

An ADEC solid waste permit is required. Consult with ADEC on the landfill status and the current information on the adequacy of landfills. Currently, no approved hazardous waste disposal sites exist in Alaska. Municipal landfills in Alaska either no longer accept oily wastes or accept only lightly oiled soils.

# 5220.9 - Maintenance and Fueling Facilities (land/water)

<u>Fueling Sites</u>: Fuel (automotive, marine, and aircraft) is available in all major communities within the region. Fueling facilities for vessels within the region can typically be found at any small boat harbor or marina. During a response to a spill not in the immediate vicinity of a fueling facility or in a remote location, some type of fuel depot or fuel dispensing barge will be necessary. The distance traveled and the available cargo load for aircraft may require the establishment of fuel caches. Determine the availability and need of suitable cache locations as required to meet the specific requirements of the response. Charter air services operating within the region can provide valuable information relative to this requirement.

<u>Maintenance Facilities</u>: Extensive maintenance and repair facilities do not exist in most regions of Alaska. For more on marine services at a specific location, contact the local harbormaster's office. Extended operations outside of the immediate vicinity of maintenance facilities will require that self-contained facilities be brought on-scene.

5220.10 – Fish and Wildlife Response Facilities and Resources – TBD

#### 5230 - Vessel Support

#### 5230.1 - Boat Ramps/Launching Areas

For the location and capabilities of boat ramps in each of the communities, contact the local harbormaster. Boat ramps are typically found in developed communities within each geographic zone. If available, harbormasters can provide port information. Reference the Community Profiles regarding the vessel support capabilities at a specific community or contact the village coordinator for specific information and capabilities.

# 5230.2 - Vessel/Boat Sources

Vessel/ Boat resources can be found in Commercially Available Equipment Section 5210.4.1.

#### 5240 - Ground Support

# 5240.1 - Transportation

The road and airport network in the Prince William Sound Area provides the capability to transport significant quantities of equipment and personnel to and from most towns in the region. After transport to these locations, equipment may need to be transferred to vessels for on-scene deployment. Aircraft, both fixed-wing and helicopter, will shuttle personnel between the response site and the staging area if vessel transport is untimely or impossible. Part Two of this section lists some vessels working within the area. A large number of fishing vessels operate in and around Prince William Sound as well as the nearby regions of Cook Inlet and Kodiak. Vessel availability will depend on the season and the oil spill's location. Alyeska/SERVS maintains a listing of pre-contracted vessels with trained personnel (typically fishing vessels and crew) for spill response. These vessels and crew may be available through the proper contractual agreements.

#### 5240.2 - Vehicle Sources

Also refer to *Community Profiles* for additional information that may be available for a specific town or village, including the possibility of local heavy equipment availability.

See the local Phone Book/Yellow Pages for up-to-date listings of companies that commercially rent or lease trucks and automobiles. Also see the Community Profiles section for information on local rental car companies.

# **TRUCK RENTING & LEASING:**

Valdez	835-5230
Tok	883-4251
Glennallen	822-4090
Valdez	835-4402
Cordova	424-5982
Cordova	424-3272
Cordova	424-5279
	Tok

# **TRUCKING - MOTOR FREIGHT:**

Copper Basin Distributors	Glennallen	822-3278
Copper Valley Construction Co. Inc	Glennallen	822-3252
Eyak Trucking	Cordova	424-7420
Hoover's Movers Inc.		
Lynden Transport Inc	Cordova	424-4780

#### **5300 – SERVICES**

#### 5310 - Food

A major response in Prince William Sound will require significant quantities of food and the associated equipment necessary for properly handling, storing, preparing and disposal. These tasks would require contract support from the local area as long as the requirements did not exceed local capability. Anchorage has numerous construction support organizations that could provide portable field kitchens and catering support complete with portable shelters. This support can be provided in air transportable "packages".

# <u>5320 – Medical</u>

5320.1 - Medical Facilities

Hospitals and clinics within the Prince William Sound Area are listed below:

FACILITY	LOCATION	LOCATION CAPACITY		PHONE
Cordova Community Medical Center	Cordova	23 bed hospital; treat, stabilize & transfer to Anchorage (acute care and long term care facility)	Yes	424-8000
Cross Road Medical Center	Glennallen	4 bed clinic; treat, stabilize & transfer to Anchorage	Yes	822-3203
Providence Valdez Medical Center	Valdez	21 bed hospital; treat, stabilize & transfer to Anchorage (acute care and long term care facility)	Yes	835-2249
Chistochina Health Clinic	Chistochina	Clinic	No	822-3280
Chitina Health Clinic	Chitina	Clinic	No	823-2213
Copper Center Village Health Clinic	Copper Center	Clinic	No	822-3541
Ilanka Health Center	Cordova	Clinic	No	424-3622
Gulkana Health Clinic	Gulkana	Clinic	No	822-3646
Mentasta Village Clinic	Mentasta	Clinic	No	291-2320
Tatitlek Health Clinic	Tatitlek	Clinic	No	325-2235
Whittier Medical Clinic	Whittier	Clinic		472-2303

#### 5330 - Sanitation

Restroom facilities for remote or extended beach operations must be provided since most locations within the region are undeveloped. Portable toilets may be located on barges for use by boat crews working on the response. Portable restrooms should be readily available from the Copper Basin Sanitation Service Company (Glennallen, 822-3600) and, of course, in Anchorage. The units can be emptied into a pump truck mounted on a barge, pumped into a sewage barge, or airlifted by helicopter to a receiving site. Coast Guard-approved marine sanitation devices aboard vessels or designated sewage barges are other options that may be used in remote sites. Land-based outhouses will require permits from the state and the land managing agency or private owner.

#### 5340 - Clothing

Alaska's environmental conditions dictate that response personnel be equipped to operate in the harsh arctic/subarctic environment. Personnel must arrive on-scene with adequate clothing to begin working immediately.

#### 5400 - COMMUNICATIONS

Adequate communications equipment along with a well-thought out communications plan are imperative to a coordinated response. For responses involving numerous vessels or operations distant from the command center, the communications center will have to be placed as close to the response location as feasible. The communication center will require telephones, facsimile machines, single side-band, and VHF-FM base station with additional portable radios. The distances involved may necessitate the installation of additional VHF repeater stations to allow communications at greater distances.

Contingency planners must seriously address their communications requirements in the event of a spill. Failure to properly command and control response resources will prove devastating to the response.

#### 5410 – Communications Plan

5410.1 – Incident Communications

#### MARINE FREQUENCIES

Channel	Accessibility/Ch	annel Designation	Freq	uencies
Designation	ADEC Oil Zone	ADEC Mar Zone	Transmit	Receive
M9		Х	156.4500	156.4500
M10		X	156.5000	156.5000
M11		Х	156.5500	156.5500
M13		X	156.6500	156.6500
M16		X	156.8000	156.8000
M17		X	156.8500	156.8500
M18A		Х	156.9000	156.9000
M21A		Х	157.0500	157.0500
M22A		Х	157.1000	157.1000
M66		X	156.3250	156.3250
M67		X	156.3750	156.3750
M69		X	156.4750	156.4750
M71		X	156.5750	156.5750
M72		X	156.6250	156.6250
M73		X	156.6750	156.6750
M74	X		156.7250	156.7250
M80A	Х		156.0250	156.0250
M81A	Х		157.0750	157.0750
M85	Х		157.2750	157.2750

<sup>\*\*</sup>Coast Guard working channels only; monitor only, unless permission received from local Coast Guard Command authorizing use while working a spill or a drill.

# 5410.2 – Communications Support

# OTHER COMMUNICATION ASSETS

STATE OF ALASKA COMMUNICATION ASSETS									
	EQUIPMENT QTY AGENCY LOCATION CONTACT PHONE								
RADIO EQUIPM	IENT								
Portable VHF	Fly-Away Kit	1	ADEC	Fairbanks	NART Office	451-2121			
Base Stations	Fly-Away Kit	2	ADEC	Anchorage	CART Office	269-3063			
(Fly-Away Transceivers)	Fly-Away Kit	2	ADEC	Juneau	SART Office	465-5340			
	Handheld Radios	10	ADEC	Statewide	CART Office	344-7380			
	Base Radio	1	ADEC	Valdez	CART Office	835-4698			
Base and Hand Held Ground-Air	Handheld Radios	3	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478- 2337			
Radios	Base Radio	7	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478- 2337			
	Handheld Radios	3	ADEC	Soldotna Anchorage	CART Office ADEC WHS	269-3063 344-7380			
	Base Radios	2	ADEC	N/A	N/A				
VHF Marine Radios	Handheld Radios	8	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478- 2337			
	Base Radios	9	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478- 2337			
	Motorola Saber	2	ADEC	Anchorage Valdez	CART Office	269-3063 835-4698			
	Motorola Saber II	67	ADEC	Statewide	ADEC WHS	344-7380			
	Motorola Saber I, Programmable, 12 channels	22	ADEC	ADEC Whse (10) Statewide (12)	ADEC WHSe	344-7380 344-7380			
Handheld	Motorola P-100 Radios, 2 channels	19	ADEC	Anchorage	ADEC WHSe	344-7380			
Portable VHF Radios	Motorola MX- 360 Radios, 6 channels	13	ADEC	Anchorage (11) Kenai (2)	ADEC WHSe CART Office	344-7380 269-3063			
	Bendix/King Radios	4	ADEC	Anchorage (2) Fairbanks (2)	ADEC WHSe NART Office	344-7380 451-2121			
	Bendix/King Radios	25	DMVA	Ft Richardson	SEOC	428-7100 800-478- 2337			

STATE OF ALASKA COMMUNICATION ASSETS							
	EQUIPMENT	QTY	AGENCY	LOCATION	CONTACT	PHONE	
	MAXON SP2550SMX	7	DMVA	Ft Richardson	SEOC	428-7100 800-478- 2337	
	Motorola Saber III	2	DMVA	Ft Richardson	SEOC	428-7100 800-478- 2337	
	Motorola MX 360 Radios	1	DMVA	Ft Richardson	SEOC	428-7000 800-478- 2337	
	Ericson GE	6	DMVA	Ft Richardson	SEOC	428-7000 800-478- 2337	
MISCELLANEOU	JS EQUIPMENT	1					
Auvilian	Honda 1KW generators	4	ADEC	(2) Warehouse (1) Fairbanks (1) Juneau	ADEC WHSe NART Office SART Office	344-7380 451-2121 465-5340	
Auxiliary power supply (primarily for comms	Honda 1KW generators	4	DHS&EM	Ft Richardson	SEOC	428-7100 800-478- 2337	
equipment)	Northern Lights 5KW Generator	4	DHS&EM	Ft Richardson	SEOC	428-7100 800-478- 2337	
	Generac, 4KW	2	DHS&EM	Ft Richardson	SEOC	428-7100 800-478- 2337	
Catallita	INMARSAT-M	3	ADEC	(1) Fairbanks (1) Anchorage (1) Juneau	NART Office ADEC WHSe PERP Staff	451-2121 344-7380 465-5340	
Satellite phone	SKY CELL	1	ADEC	Juneau	SART Office	465-5340	
systems (INMARSAT)	IRRIDIUM PHONE	4	ADEC	(2) Anchorage (2) Fairbanks	ADEC WHSe NART Office	344-7380 451-2121	
	Mitsubishi, MSAT	6	DMVA	Ft Richardson	SEOC	428-7100 800-478- 2337	
Interoperable radios and auxiliary power units			Volunteer fire depts.	Bayside and Womens Bay		486-8040	
Portable fax		3	ADEC	Anchorage	ADEC WHSe	344-7380	

STATE OF ALASKA COMMUNICATION ASSETS							
	EQUIPMENT	QTY	AGENCY	LOCATION	CONTACT	PHONE	
machines		2	DHS&EM	Ft Richardson	SEOC	428-7100 800-478- 2337	
Global Positioning System (GPS) Units	Marine System	6	DHS&EM	Statewide	ADEC WHSe	344-7380	

5410.3 – Communication Facilities – TBD

#### 5410.4 – Emergency Communications

Three separate systems for broadcast of emergency messages are available to the Alaska Regional Response Team (RRT) and the Federal or State On-Scene Coordinator. These include the NOAA Weather Radio System, the State of Alaska Emergency Alert System, and the National Warning System.

**NOAA Weather Radio System:** The Alaskan NOAA Weather Radio System is handled through the National Weather Service (NWS) and is constantly updated. The NOAA Weather Radio System operates in two modes, i.e. normal and alarm. In the normal mode, the system provides regionally specific updated weather information. In an emergency, NWS can activate the alarm mode. In the alarm mode, NWS can remotely activate any one of 15 remote radio weather transmitters. The OSC or the RRT can activate the alarm mode of the Alaskan NOAA Weather Radio System by contacting the NWS and stating that they wish to activate the NOAA Weather Radio System to service certain geographical areas. All messages should be short and concise. As a minimum, provide the following information:

- The nature of the emergency
- Actions underway by local, State and federal agencies and the Responsible Party
- Special instructions to the public

Standard NOAA weather radio transmitters (with a nominal 45-mile broadcast radius) are situated at strategic locations throughout the state. In addition, when NOAA makes a broadcast on its weather radio affecting a specific geographical region, it can also notify the local primary Common Program Control Station (CPCS-1), a component of the Emergency Alert System, covering the affected area and ask the CPCS-1 station to rebroadcast the emergency message.

**State of Alaska Emergency Broadcasting System:** The Alaska Division of Homeland Security and Emergency Management (ADHSEM) is responsible for activation of the State Emergency Alert System (EAS). The State EAS can be activated statewide or regionally. To use the EAS, contact ADHSEM and request system activation.

**National Warning System:** The ADHSEM also operates the Alaska component of the National Warning System (NAWAS). The NAWAS alerting system is designed to provide immediate notification to 28 communities and agencies located in Alaska. This system uses dedicated commercially leased landlines. To use this alerting system, contact ADHSEM and request activation of the NAWAS.

To activate either the EAS or the NAWAS contact ADHSEM at **1-800-478-2337** or **907-428-7000** and provide information as noted above in paragraph a: NOAA Weather Radio System.

# 5420 - Communications Capabilities

#### 5420.1 - General

Adequate communications equipment along with a well thought out communications plan are imperative to a coordinated response. For responses involving numerous vessels or operations distant from the command center, the communications center will have to be placed as close to the response location as feasible. The communication center will require telephones, facsimile machines, single side band, and VHF-FM base station with additional portable radios. The distances involved may necessitate the installation of VHF repeater stations to allow communications at greater distances. Contingency planners must seriously address their communications requirements prior to a spill. Failure to properly command and control response resources will prove devastating to the response.

Good, dependable communications between the command center and field operations is essential for an efficient spill response. For minor, short duration responses, a minimum of direct point to point communications will be needed and can normally be provided with two or more VHF marine portable radios or, possibly, with telephones. For large, extended responses covering a wide area, a communications set up as close to the incident as possible will be necessary. The communications center will require telephones, facsimile machines, and a single sideband/VHF-FM base station along with additional portable radios. Satellite communications may be added as required.

During prolonged spills, VHF repeaters, multi-frequency scanners, and continuous tape recorders may need to be installed. Portable repeaters can increase the communication range several fold depending upon where the repeaters are placed, by supplementing the coverage provided by permanently installed repeaters.

All responses will require either a simple communication schedule identifying when reports are to be transmitted and when field crews are to report, or a full-scale communications management plan that includes the assignment of frequencies, channels, and call signs for various operations.

#### 5420.2 - Radios

Marine communications at the command center and aboard vessels will generally require 25 watt VHF marine radios with high gain antennas. Vessels usually monitor channel 16 and switch to other working frequencies. When aircraft are used in conjunction with on-water activities such as directing vessel movements, VHF marine frequency radios will be required for use by the aircraft. Due to aircraft noise, these radios should be equipped with headsets and boom mikes. Communications with aircraft from the command center will require standard VHF frequency capability.

In large spills where the responsible party is unknown or is not responsive, the contracted response organization will be required to provide the necessary communications "package".

The ADEC maintains a variety of communications equipment that will be employed during a spill incident. A system of six fixed repeaters in Prince William Sound allows for a wide range of VHF radio coverage. Table below provides a list of the repeaters and their locations and operating frequencies.

Location	Latitude	Longitude	Transmit	PL Code	Receive
Naked Island	60°38' 48"N	146°35'48"E	159.450	141.3	151.310
Jack Mountain/Gore Peak	61°03'18"N	146°35'48"E	154.755	114.8	159.255

Heney Ridge	60°31'30"N	145°41'36"E	154.830	127.3	59.315
LaTouche Island	60°00' 09"N	147°54'05"E	154.815	114.8	159.285
Ellamar Mountain	60°55'07"N	146°40'05"E	159.390	114.8	151.370
Rugged Island	61°03'18"N	146°35'48"E	154.830	127.3	159.315

A schematic drawing of the repeater footprints is provided in figures 1-6. These repeaters are now linked with the Anchorage ADEC offices allowing for direct communications between locations in Anchorage and Prince William Sound. ADEC also maintains portable repeaters, a large number of handheld portable radios, portable VHF base stations, and other communications equipment. The Alaska Department of Military and Veterans Affairs, Division of Homeland Security and Emergency Management has a mobile emergency communications system that could be established during an emergency declared by the governor. In the initial stages of a response, this system might be available to the Unified Command but only until a separate communications system could be established. The state's system is intended for use by state agencies in emergency situations and not as a joint-use system for other response agencies/organizations.

FIGURE 5-1: VHF REPEATER FOOTPRINTS NAKED ISLAND

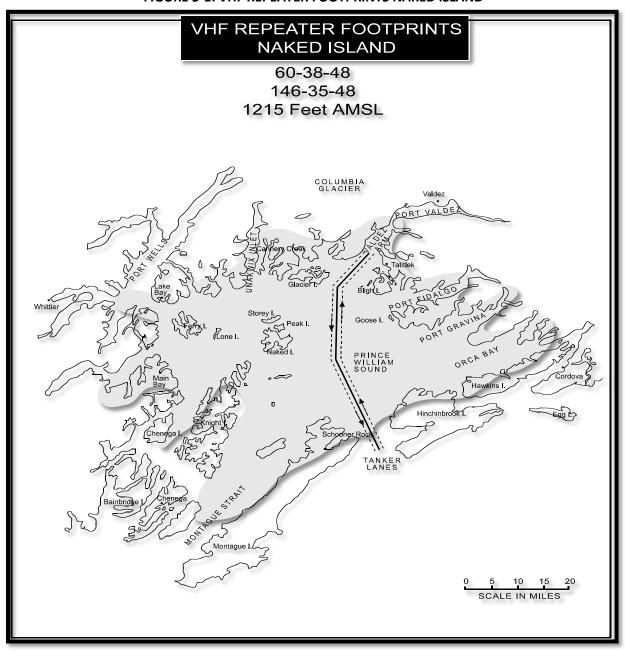


FIGURE 5-2: VHF REPEATER FOOTPRINTS JACK MOUNTAIN

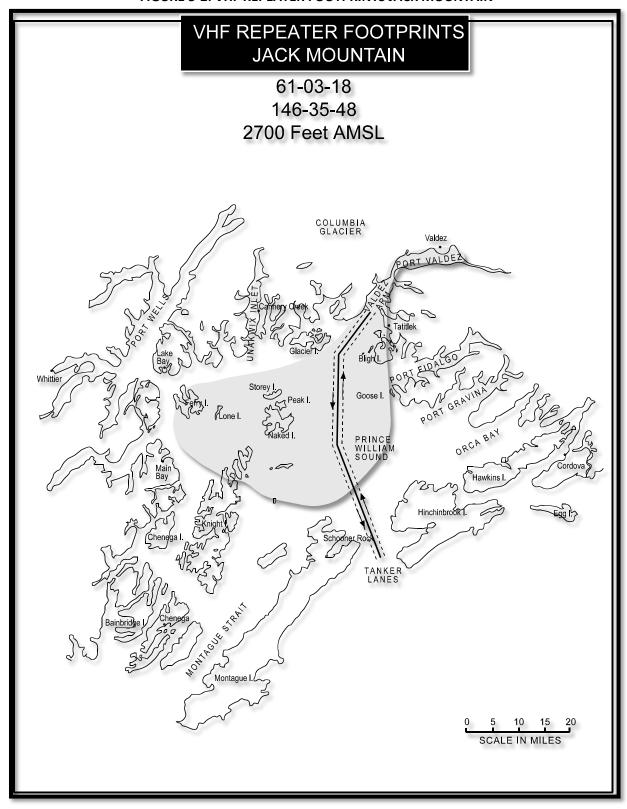


FIGURE 5-3: VHF REPEATER FOOTPRINTS HENEY RIDGE

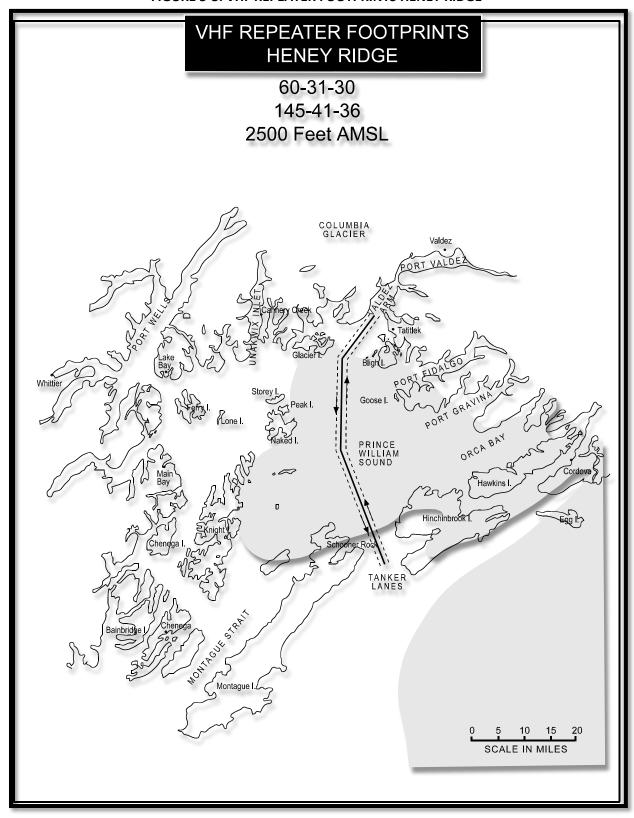


FIGURE 5-4: VHF REPEATER FOOTPRINTS LATOUCHE ISLAND

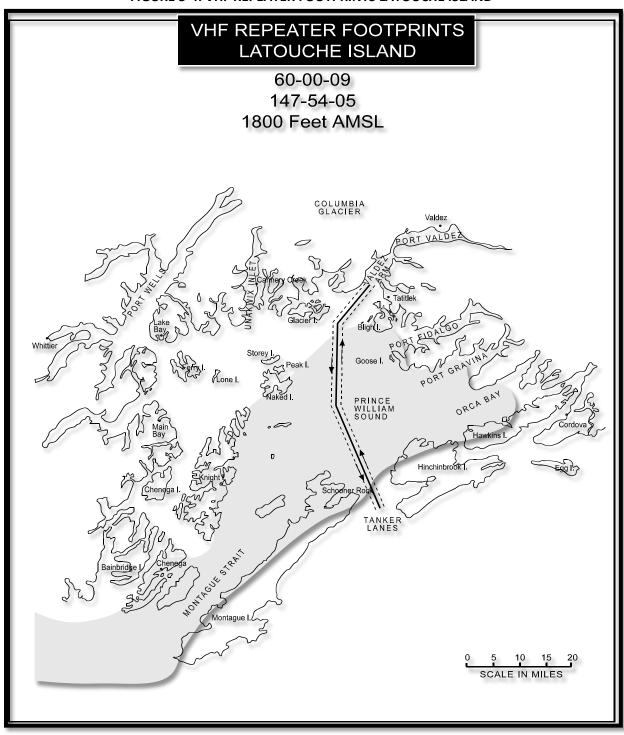


FIGURE 5-5: VHF REPEATER FOOTPRINTS ELLAMAR MOUNTAIN

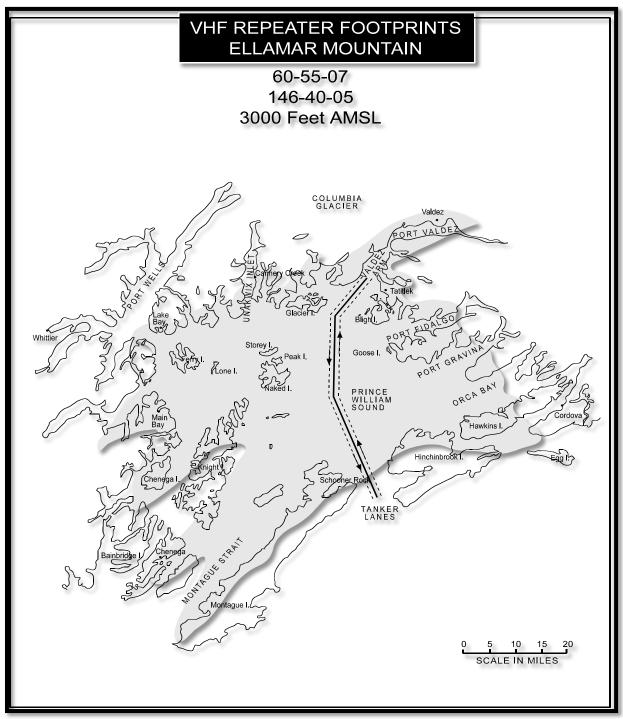
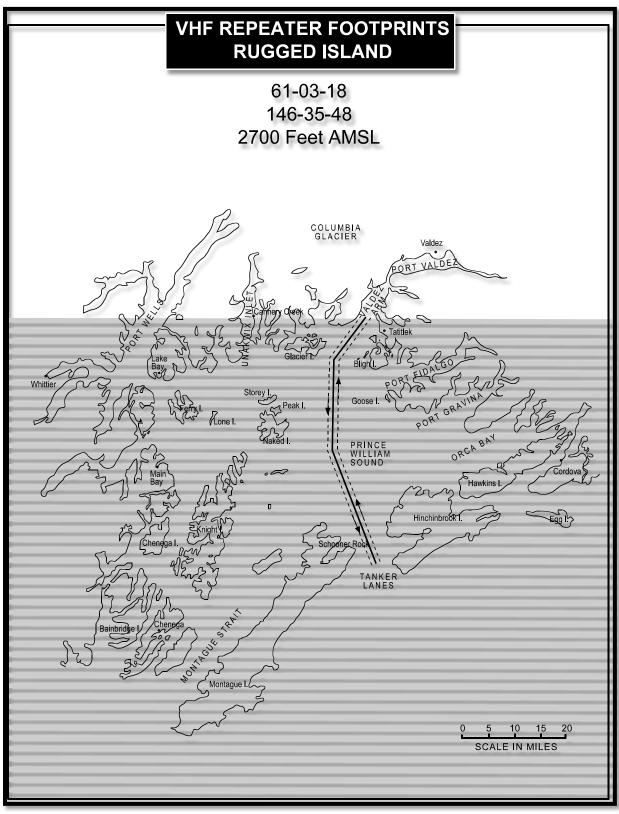


FIGURE 5-6: VHF REPEATER FOOTPRINTS RUGGED ISLAND



#### Alaska Department of Natural Resources, Division of Forestry – Radio Communications Assets:

The following provides an inventory of Alaska Department of Natural Resources (ADNR), Division of Forestry (DOF) radio communications assets in the PWS Area.

ADNR-DOF Southcentral Regional Office
Anchorage: 269-8463 Fax: 269-8931

DOF's Southcentral Regional Office (SCRO) can transmit (Tx) and receive (Rx) on all the repeater frequencies for the region. They also have an intercom connection to the three area SCRO locations at Big Lake, Kenai, and Copper River through the State microwave system.

# **VHF**

		<u>Channel</u>	<u>Location</u>	<u>TX</u>	<u>RX</u>
1)	KKAF Initial Attack	Channel 1	Sterling	159.270	151.265
2)	AMSA Initial Attack	Channel 3	Mt Susitna	159.270	151.265
3)	VCRA Initial Attack	Channel 5	Tolsona	159.330	151.325
4)	Air Guard	<b>USFS</b> Air Guard	Cooper Mt	168.625	168.625
<u>UHF</u>					
1)	AMSA/ER Warehouse	Channel 1	Mt Susitna	458.100	453.100
	& SCRO Logistics				
2	VCRA Logistics	Channel 2	Tolsona	458.350	453.350
3)	KKAF Logistics	Channel 3	Sterling	458.500	453.500
Α	IR TO GROUND (Mt Susitna)			132.45	132.45

INTERCOM Intercom through the State microwave to each of the SCRO area offices (Big Lake, Kenai, and Copper River)

KKAF = Kenai/Kodiak Area Forestry

AMSA = Anchorage/Mat-Su Area Forestry

VCRA = Valdez/Copper River Area Forestry

Remote Telephone Interface (RTI) – There is a RTI located on Mt. Susitna. This allows radios in the Anchorage area to connect with the phone system and then make phone calls. This is used by State Parks, U.S. Forestry Service, and DOF. Each agency has eight radios that access the system.

# **MISCELLANEOUS**

	<u>Location</u>	<u>TX</u>	<u>RX</u>	
1) Air-Ground	Ester Dome	132.45	132.45	
2) Regional Intercom	For contact to all NRO area offices			

# Valdez/Copper River Area Office (VCRA)

Business: 822-5533/762-2372 Fire: 822-5533 Fax: 822-5539

The Dispatch office is located 5 miles south of the junction of the Glenn Hwy and the Richardson Hwy on the Richardson Hwy. The console has the following frequencies:

	<u>Cha</u>	nnel	Location	<u>TX</u>	<u>RX</u>
	1) Cha	innel 5	Tolsona	159.330	151.325
	Tols	sona Initial Attack			
	2) Air		Tolsona	168.625	168.625
	USF	S Air Guard (Tolsona	1)		
<u>UHF</u>					
	3) Cha		Tolsona	458.850	453.350
	Tols	sona Logistics (Simul	cast with Willow Mt)	458.500	453.500
		/=:	/p.o.=	.=	
	Low Band	Parks/Fish and Gam	ne/DOF	45.00	45.04
	Air to Ground			132.45	132.45
	Pager	State Pager System		453.775	
	Intercom	All SCRO Forestry O	Offices	State Microway	e System
		,			,

The VCRA Office has 2 UHF Repeaters (Willow Mt and Tolsona) and 1 VHF Repeater (Tolsona).

# 5420.2 - Telephones

Telephone support will have to be coordinated through the local telephone utility. The requirements for telephone support may overload the capability of some of the remote locations resulting in delays in acquiring a suitable number of lines. Long distance service may also be severely limited during initial operations.

#### 5420.3 - Telefax

Dedicate at least two fax machines at the command center. Two fax machines are available at the USCG work area in the VEOC. Fax machines may be purchased or rented in the larger communities within the region. For remote responses, plan to deploy to the spill location with adequate fax capability since availability may be limited or non-existent. Use one machine for incoming and one for outgoing traffic. Establish procedures very early in the response for sending, receiving, and distributing fax's. Publish the fax numbers within the Command Center so that these numbers can be referenced to agencies/organizations outside the command structure.

# 5420.4 - Portable Telephones

Cellular telephone coverage is rather limited in Alaska and can't be relied upon as a primary means of communication. However, cellular phones can provide an additional means of maintaining communications with individuals outside the command center. Recently, significant improvements in the cellular networks has increased coverage areas. That trend is likely to continue.

ADEC has portable, briefcase-sized satellite terminals (INMARSAT-M) and the USCG's Pacific Strike Team has available an INMARSAT Telesystem (TCS-9200). These systems are capable of placing and receiving calls from anywhere in the world, including remote locations, and supporting fax and computer modem

operations. The U.S. Department of Defense (DOD) and Alaska National Guard may also have portable satellite communications packages available.

#### 5420.5 - Portable radios

Response teams will need portable radios with backup batteries and chargers. The responsible party/response contractor must provide adequate radios for their personnel. MSU Valdez has six handheld marine VHF radios. ADEC maintains approximately 90 Saber-series handheld portable VHF radios as well as limited quantities of other portable VHF radios. Additional portable VHF radios may be available through other State agencies such as the Alaska Department of Natural Resources (Forestry Division) and the Alaska Department of Military and Veterans Affairs.

#### 5420.6 - Portable Communications Trailers

Portable communications trailers are rare in Alaska. The major response cooperatives have the capability to establish portable communication centers, either in fly-away kits or road transportable units. The 103<sup>rd</sup> Civil Support Team (Alaska National Guard) also has extensive command, control, and communications capability that may be available to support a major spill response. The Navy Supervisor of Salvage (NAVSUPSALV) also has a command trailer, as does ADEC. DOD has extensive communications capabilities that could conceivably be made available in the event of a significant spill.

#### 5420.7 - Copiers

Dependable high-volume copiers will be required in the command center. The size of the response will dictate the number of copiers required. Having more than one copier is advisable in the event that one machine breaks down from overuse. Copy machines for mobile and forward command centers should also be considered.

#### 5420.8 - Interpreters

With the growing influx of other cultures into Alaska, plus the possibility of foreign-flag vessels, language barriers may arise. Response staff may need the skills of an interpreter. Local hospitals and the State Troopers are the two most likely sources for the names of available interpreters.

# 5430 - Federal Communications Assets

**General:** The following is a description of USCG VHF and HF radio coverage in Alaska. The USCG provides VHF-FM throughout the Southeast and South Central coastal areas and two sites in the Bering Sea. This coverage is not continuous along the coast. High Frequency (HF) coverage provides additional coverage for offshore Alaskan waters. VHF-FM Communications are monitored continuously at Juneau, Valdez and Kodiak operated by USCG Sectors in Juneau and Anchorage. Each Communication Center has listening watches on VHF Channel 16 and 2182 KHz. Communication Station Kodiak (CommSta) provides 24 hour HF coverage on 2182 KHz and 4125 KHz. USCG cutters and aircraft have HF, VHF, and UHF capabilities during underway or air borne operations. All USCG ships (while in port) and shore stations in Alaska are interconnected with a wide area network. All data and recorded message traffic is carried on this network. Telephone service is available at all USCG units. Cellular phone capabilities are available throughout large areas of the state's coastal areas and along the road system. The Juneau USCG District Office maintains a sole satellite capability with other DOD entities.

Each Communication Center can be contacted via VHF-FM channel 16. For communications in Southeast Alaska, Upper Cook Inlet (Site Summit High Site) and the Bering Sea (Cold Bay and St. Paul Island) contact the Sector Juneau Command Center. For Prince William Sound, communications contact Sector

Anchorage Command Center. Valdez and Kenai Peninsula, Cook Inlet and Kodiak Island communications are Sector Anchorage Command Center.

Sector Juneau Command Center: Commercial Phone: (907) 463-2980

Fax: (907) 463-2023

Email: d17-pf-SectorJuneauCommandCenter@uscg.mil

Sector Anchorage Command Center Commercial Phone: (907) 428-4100 Toll Free Phone: 1 (866) 396-1361

Fax: (907) 428-4114

Email: sector.anchorage@uscg.mil

Communication Station Kodiak: Commercial Phone: (907) 487-5778

Seventeenth District Command Center: Commercial Phone: (907) 463-2000

Toll Free: (800) 478-5555 Cell Phone: \*CG (\*24)

Telex: 49615066 Easylink: 62907427

Fax: (907) 463-2023

Email: jrccjuneau@uscg.mil

**USCG Communications Capabilities:** The following are USCG Aircraft, Ship, and Shore Station communications capabilities.

- 1. C-130 (Fixed wing), H60, and HH65 (Helicopter) Communications Capabilities:
  - HF 2-30 MHZ
  - VHF 30-87.975 MHZ, Guard 40.5
  - VHF 108-117.975 MHZ, AM, RX only
  - VHF 118-155.975 MHZ, AM TX/RX, Guard 121.5
  - VHF 156-173.95 MHZ, FM, Guard 156.8 (Channel 16)
  - UHF 225-399.975 MHZ, AM, Guard 243.0
  - ADF FULL DF CAPABILITIES EXCEPT FOR HF
  - .
- 2. Patrol Boats (WPB), and Buoy Tenders (WLB):
  - HF 2-30 MHZ
  - VHF-FM 146-174 MHZ, Preprogrammed channels only, State Trooper 155.2500, and State Disaster 155.2950 are preprogrammed.
  - VHF-FM 156-162 MHZ marine band
  - UHF 225-399.975 MHZ

#### 3. USCG Shore VHF-FM Fixed Sites:

Drings William Sound / Sector Anchorage Areas				
Prince William Sound/Sector Anchorage Area:	CO4.44.CN14.4C20E2N4			
CAPE HINCHINBROOK HF	601416N1463852W			
CAPE YAKATAGA HF	600456N1422917W			
VHF Maritime (NDS & Local)				
CAPE HINCHINBROOK	601416N1463852W			
CORDOVA (AVSUPFAC)	602941N1452821W			
CORDOVA (TRIPOD HILL)	603312N1454402W			
NAKED ISLAND	603846N1472043W			
POINT PIGOT	604904N1482249W			
POTATO POINT	610324N1464151W			
VALDEZ	610735N1462113W			
VALDEZ SPIT	610726N1462108W			
UHF Air/Ground				
CORDOVA (AVSUPFAC)	602941N1452821W			
KODIAK	574413N1523013W			
VHF Maritime (NDS & Local)				
BALLYHOO	535508N1663031W			
BEDE MOUNTAIN	591836N1515644W			
CAPE GULL	581156N1541222W			
COLD BAY	551504N1624540W			
KODIAK	574413N1523013W			
MARMOT ISLAND	581414N1514920W			
PILLAR MOUNTAIN	574718N1522620W			
RASPBERRY ISLAND	580406N1532257W			
RUGGED ISLAND	595138N1492323W			
SAINT PAUL ISLAND	570714N1701653W			
SITE SUMMIT	611531N1493141W			
SITKINAK DOME	563334N1541106W			
TUKLUNG MOUNTAIN	585128N1592758W			
UHF Air/Ground				
PILLAR MOUNTAIN	574718N1522620W			

The above National Distress System (NDS) high sites are monitored 24 hours a day, 365 days a year from Sector Juneau, Airsta Kodiak and MSU Valdez. Those locations listed beneath are remoted to the respective control station by landline, microwave, UHF, or VHF or a combination thereof.

- All sites (except those under Valdez) have the following channels: 6, 12, 16, 21A, 22A, 81A
- Valdez (except for Cordova) have channels: 6, 13, 16, 21A, 22A, 81A
- Cordova has channels: 13, 16, 21A, 22A

Those locations marked (HF) Guard 2182 KHz International Distress and calling frequency are capable of operation in the 2-30 MHz range, but on preprogrammed frequencies only. They <u>DO NOT</u> contain any State or Local emergency frequencies. Changes require a technician to physically go to the remote site and reprogram the frequency; they are not remotely changeable/programmable.

Communications Station (CommSta) Kodiak maintains a full long-range HF capability 2-30 MHZ.

## 4. Portable Communications Capabilities:

**Kodiak Air Station (AirSta) Capabilities**: Hand held VHF-FM radios, 156-162 MHZ **Kodiak Communications Station (CommSta) Capabilities**:

- 1) URC 94 (1 each), HF/VHF AM/FM/CW/SSB Upper/Lower Sideband, Transceiver, HF 1.5-29.999 MHZ, 100 Watts, 12,000-mile range. VHF 30.0-79.999 MHZ, 50 Watts, 5-mile range.
- 2) ARC 94, 2-30 MHZ, 1k increments, 125 Watts
- 3) ARC 190, 2-30 MHZ, 100 Hz increments, 400 Watts
- 4) ARC 618, 118-135.9 MHZ, 1k increments
- 5) RC 513, 150-173.995 MHZ, 25k increments
- 6) ARC 159, 225-399.975 MHZ, 25k increments
- 7) ARC 182 V/U, 1 VHF 30-87.975 MHZ, Guard 40.5
- 8) 2 VHF 108-117.975 MHZ, AM, RX only
- 9) VHF 118-155.975 MHZ, AM TX/RX, Guard 121.5
- 10) 3 VHF 156-173.95 MHZ, FM, Guard 156.8 (Channel 16)
- 11) 4 UHF 225-399.975 MHZ, AM, Guard 243.0

# <u>5440 – State Communication Assets</u>

The ADEC currently operates an assortment of communications equipment, including a variety of VHF hand-held and base station radios, portable repeaters, repeater extenders, and portable satellite phones. Additionally, sixteen wide-area mountaintop VHF repeater sites in Juneau, Prince William Sound, the Kenai Peninsula, the Anchorage area, Fairbanks, Kodiak and the North Slope are available to enhance area communications.

ADEC is also part of the Alaska Land Mobile Radio (ALMR) system.

ADEC communications equipment is maintained by the logistics staff, which can be reached at 465-5234 in Juneau or 344-7380 in Anchorage. The Alaska Department of Administration Enterprise Technology Services (ETS) branch provides communications support and can be reached at 269-5781 in Anchorage.

The ADEC maintains three communications flyaway kits statewide (one each in Fairbanks, Anchorage, and Juneau) to support on-scene operations. Each kit consists of a VHF/FM base station radio with two 12-volt batteries and supporting hardware (the radio can also operate on commercial power). In addition to the flyaway kits, ADEC has portable suitcase repeater systems, which will provide extended range for on-scene communications. Two UHF suitcase repeater systems are also available, along with 48 compatible handheld transceivers. Four 100-watt portable generators can be deployed to provide power for the communications equipment.

The State DMVA Division of Homeland Security and Emergency Management also acquired a Mobile Emergency Operations Center (MEOC). General facts and information on the MEOC are provided below. The MEOC can be deployed anywhere along Alaska's road system to support a major response operation.

## **Vehicle Specifications:**

Make/Model Freightliner Columbia

Length: 45 feet

• Licensed Gross Weight 56,000 pounds

• Dispatch Weight (full fuel) 41,000 pounds approximately

Fuel Capacity
 140 gallons (3 days' supply at full electrical load)

Emergency Vehicle Equip.
 Lights, siren, public address

Internal & External lighting
 White/Red internal with external floods

Electrical
 Separate Chassis and Coach battery systems for DC

Two 12.5 KW generators to support AC load

## **Command Center Capabilities:**

- Configured to support a Unified Command level incident.
- Command center will support 10 workstations with laptops.
- Spare dispatch position in Command Center
- High Speed satellite system; supports video conferencing, VOIP phones, Wi-Fi and internet.
- Self-erecting and self-orienting satellite system.
- Supports up to 16 Voice Over Internet Protocol (VOIP) telephones via satellite.
- Receive and record both analog and digital broadcast television.
- External tower mounted (pneumatic extension/retraction) high-resolution color video camera with full optical and digital zoom via remote control.
- Multiple video screens with video management panel and external video capability.

#### **Dispatch Center Capabilities:**

- Four computer aided dispatch positions utilizing Telex C-Soft software with full patch capability.
- Headsets, boom microphones and foot switches available to dispatchers
- Hard mounted ergonomic dispatcher seating.
- Four ALMR mobile radios, panel mounted
- Two Conventional VHF radios, panel mounted
- High and Low UHF radios, panel mounted
- 700/800 MHz (AWARN) radio, panel mounted
- Marine Radio, panel mounted
- VHF AM aircraft radio, panel mounted for Air-Ground comm.
- ARES capable amateur radio
- Citizens Band radio
- On board ALMR capable portable radio cache with gang charger

## **Support Equipment:**

- 24 inch plotter for maps, drawings, etc...
- Fax/copier
- Document printer
- Fridge, microwave and coffee pot for extended deployment (comfort items)
- Support trailer with storage space to house up to 5 personnel for extended deployment

State of Alaska Communication Assets							
Equipment Quantity Agency Location Contact Phone							
RADIO EQUIPMENT							
ADEC Fixed Base Station							
Portable VHF Base	Fly-Away Kit	1	ADEC	Fairbanks	NART Office	451-2126	
Stations (Fly-Away	Fly-Away Kit	2	ADEC	Anchorage	CART Office	269-7542	
Transceivers)	Fly-Away Kit	2	ADEC	Juneau	SART Office	465-5233	
	Handheld Radios	10	ADEC	Statewide	CART Office	344-7380	
	Base Radio	1	ADEC	Valdez	CART Office	835-4698	
Base and Hand Held Ground-Air Radios	Handheld Radios	3	DMVA ECRT	Ft Richardson	SEOC	428-7000 800-478-2337	
	Base Radio	7	DMVA ECRT	Ft Richardson	SEOC	428-7000 800-478-2337	
VHF Marine Radios	Handheld Radios	3	ADEC	Soldotna Anchorage	CART Office DEC Warehouse	269-3063 344-7380	
	Base Radios	2	ADEC	N/A	N/A		
	Handheld Radios	8	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478-2337	
	Base Radios	9	DMVA ECRT	Ft Richardson	SEOC	428-7100 800-478-2337	
Handheld Portable VHF Radios	Motorola Saber III	2	ADEC	Anchorage Valdez	CART Office	269-7542 835-4698	
	Motorola Saber II	67	ADEC	Statewide	DEC Warehouse	344-7380	
	Motorola Saber I, Programmable, 12 channels	22	ADEC	DEC Warehouse (10) Statewide (12)	DEC Warehouse	344-7380 344-7380	
	Motorola P-100 Radios, 2 channels	19	ADEC	Anchorage	DEC Warehouse	344-7380	
	Motorola MX-360 Radios, 6 channels	13	ADEC	Anchorage (11) Kenai (2)	DEC Warehouse CART Office	344-7380 269-3063	

State of Alaska Communication Assets							
Equipment Quantity Agency Location Contact Phone							
	Bendix/King Radios	4	ADEC	Anchorage (2) Fairbanks (2)	DEC Warehouse NART Office	344-7380 451-2145	
	Bendix/King Radios	25	DMVA	Ft Richardson	SEOC	428-7100 800-478-2337	
	MAXON SP2550SMX	7	DMVA	Ft Richardson	SEOC	428-7100 800-478-2337	
	Motorola Saber III	2	DMVA	Ft Richardson	SEOC	428-7100 800-478-2337	
	Motorola MX 360 Radios	1	DMVA	Ft Richardson	SEOC	428-7000 800-478-2337	
	Ericson GE	6	DMVA	Ft Richardson	SEOC	428-7000 800-478-2337	
			DNR				
MISCELLANEOUS EQUIPM	IENT						
Auxiliary power supply (primarily for comms equipment)	Honda 1KW generators	4	ADEC	(2) Warehouse Fairbanks (1) Juneau	DEC Warehouse NART Office SART Office	344-7380 451-2145 465-5346	
	Honda 1KW generators	4	DHS&EM	Ft Richardson	SEOC	428-7100 800-478-2337	
	Northern Lights 5KW Generator	4	DHS&EM	Ft Richardson	SEOC	428-7100 800-478-2337	
	Generac, 4KW	2	DHS&EM	Ft Richardson	SEOC	428-7100 800-478-2337	
Satellite phone systems (INMARSAT)	INMARSAT-M	3	ADEC	(1) Fairbanks (1) Anchorage (1) Juneau	NART Office DEC Warehouse PPR Staff	451-2126 344-7380 465-5233	
	SKY CELL	1	ADEC	Juneau	SART Office	465-5233	
	IRRIDIUM PHONE	4	ADEC	(2) Anchorage (2) Fairbanks	DEC Warehouse NART Office	344-7380 451-2145	
	Mitsubishi, MSAT	6	DMVA	Ft Richardson	SEOC	428-7100 800-478-2337	

State of Alaska Communication Assets						
	Equipment	Quantity	Agency	Location	Contact	Phone
Interoperable radios and auxiliary power units			Volunteer fire depts.	Bayside and Women's Bay		486-8040
Doutoble for		3	ADEC	Anchorage	DEC Warehouse	344-7380
Portable fax machines		2	DHS&EM	Ft Richardson	SEOC	428-7100 800-478-2337
Global Positioning System (GPS) Units	Marine System	6	DHS&EM	Statewide	DEC Warehouse	344-7380

ADEC owns three portable repeaters, available from the Juneau office (465-5239), the Fairbanks office (451-2145), and the Anchorage ADEC warehouse (344-7380). Repeater channel coverage is shown in the following table:

ADEC Portable	Operating Frequencies			
Repeater Channels	Transmit	PL	Receive	
ADEC Channel 1	154.755	141.3	159.255	
ADEC Channel 2	154.815	141.3	159.285	
ADEC Channel 3	154.830	141.3	159.315	

## 5440.1 – Mobile Emergency Operations Center (MEOC)

The DMVA maintains the Unified Command Mobile Emergency Operations Center, which is available for a spill response if requested by ADEC. The State originally commissioned the mobile facility for establishing an emergency operations center at the Yukon River Bridge in the event of a threat to the Trans-Alaska Pipeline, a critical State resource under the federal Buffer Zone Protection Plan of 2006. The fact sheet below provides details on this transportable operations center.

# **MOBILE EMERGENCY OPERATIONS CENTER (MEOC) FACT SHEET**

**Truck Specifications:** 

Make/Model: Freightliner Columbia

Length: 45 feet

Licensed Gross Weight: 56,000 pounds

Dispatch Weight (full fuel): 41,000 pounds approximately

Fuel Capacity: 140 gallons (3 days' supply at full electrical load)

Emergency Road Equip.: Lights, siren, public address

Internal/External lighting: White/Red internal with external floods

Electrical: Separate chassis and coach battery systems for DC; Two 12.5 KW generators to support AC load

## **Command Center Capabilities:**

- Configured to support a Unified Command level incident.
- Command center will support 10 workstations with laptops.
- Spare dispatch position in command center
- High-speed satellite system; supports video conferencing, VOIP phones, Wi-Fi, and internet.
- Self-erecting and self-orienting satellite system.
- Supports up to 16 Voice Over Internet Protocol (VOIP) telephones via satellite.
- Receive and record both analog and digital broadcast television.
- External tower mounted (pneumatic extension/retraction) high-resolution color video camera with full optical and digital zoom via remote control.
- Multiple video screens with video management panel and external video capability.

## **Dispatch Center Capabilities:**

- Four computer-aided dispatch positions utilizing Telex C-Soft software with full patch capability.
- Headsets, boom microphones, and foot switches available to dispatchers
- Hard mounted ergonomic dispatcher seating.
- Four ALMR mobile radios, panel-mounted
- Two Conventional VHF radios, panel-mounted
- High and Low UHF radios, panel-mounted
- 700/800 MHz (AWARN) radio, panel-mounted
- Marine Radio, panel-mounted
- VHF AM aircraft radio, panel-mounted for air-ground comm.
- ARES-capable amateur radio
- Citizens Band radio
- On-board ALMR-capable portable radio cache, with gang charger

## Support Equipment:

- Document printer
- Fax/copier

- 24-inch plotter for maps, drawings, etc.
- Refrigerator, microwave, and coffee pot for extended deployment (comfort items)
- Support trailer with storage space to house up to five personnel for extended deployments.

#### 5440.2 - ALMR

Alaska Land Mobile Radio (ALMR) – The State of Alaska, the Department of Defense, other federal agencies in Alaska, and local municipalities have joined together in a consortium effort to design, build, and operate and maintain a fully interoperable wireless communications system in Alaska, the Alaska Land Mobile Radio Project (ALMR). The primary objective of ALMR is to provide a reliable and secure emergency communications system for all emergency responders in Alaska, especially for multi-agency responses to emergencies and critical situations.

ALMR is a two-way radio system used by first responders and public safety officials for instant, effective, and private communications during everyday operation. It also provides the efficiency, security and flexibility required during emergencies for communications on demand and in real time.

The ALMR transportable capability provides coverage in areas outside the range of the fixed infrastructure to increase capacity during an emergency or event, or to provide temporary communications for a site where communications are down. The transportable capability includes four skids. The communications skid houses a five-channel, P25 trunk site and provides connectivity to support voice, data, internet, telephone and video. The dispatch skid provides for two dispatch locations along with control of the gateway and foreign radio equipment, acquisition and control of the satellite skid, systems monitoring and mesh network control. The tower/generator skid provides power and a crank-up microwave tower. The C and K-U band satellite skid provides reach back capability, as well as robust bandwidth to support National Incident Management System implementation at remote sites. Each skid is military air transportable and complies with requirements for both military and commercial sling lift operations, and is ground-transportable on flatbeds, meeting standards and regulations for transport along state and interstate highways.

The ALMR coverage in the State of Alaska is primarily in the Interior, Southcentral and Southeast areas of the state. For those areas of Alaska not currently within the ALMR coverage, the State of Alaska Department of Military and Veterans Affairs (ADMVA) has coordinated with state and local agencies to develop a Statewide Communications Interoperability Plan (SCIP) to address the interoperability needs of those areas. The plan envisions local entities applying for federal grants to purchase communications equipment appropriate to those communities to allow them to communicate with regional response communities through portable, tactical, interoperable IP gateway devices. For specific details of the SCIP, contact ADMVA. For additional information on the ALMR, Reference the Alaska Land Mobile Radio website.

**5500** – Reserved

5600 - Reserved

5700 – Reserved

5800 - Reserved

5900 - RESERVED FOR AREA/DISTRICT

## 6100 - FINANCE/ADMINISTRATIVE SECTION ORGANIZATION

The following are helpful resources for establishing a case specific finance/administrative section organization:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response.

Note: None of these guides is specifically prescribed by this plan, and none is mandated for use by response plan holders or potential responsible parties. Federal and State On-Scene Coordinators will work with the response organization established by the responsible party in responding to and managing oil or hazardous substance releases as long as their organization is compatible with ICS principles

#### 6200 - Fund Access

## 6210 - Federal On-Scene Coordinator (FOSC) Funding

The Seventeenth USCG District approves FOSC requests to respond to actual or substantial threat of oil pollution incidents. Procedurally, FOSC staff contacts the NPFC to request a federal pollution number and initial project ceiling. The pollution number is referenced in all subsequent correspondence. Obligation of funds is tracked to ensure the ceiling is not exceeded. For details regarding documentation and cost recovery Reference <a href="NPFC Instruction 16451.2">NPFC Instruction 16451.2</a>.

## 6220 - State Funding

State governments may request up to \$250,000.00 from the OSLTF via the appropriate FOSC. Procedures for state governments to access the OSLTF are outlined in <a href="NPFC Instruction 16451.1">NPFC Instruction 16451.1</a>.

For details on the state Oil and Hazardous Substance Release Prevention and Response Fund (OHSRPRF), reference Section 6310.2.

# 6230 - Trustee Funding

The OSLTF is available to pay for response or removal actions carried out under FOSC direction. The NPFC designates the total amount of money available and assigns a Federal Pollution Number (FPN) for the FOSC. Federal agencies working for the FOSC may request funds from the FOSC to pay for their activities.

- When an agency is notified of an incident, joint discussions between the FOSC and that agency's representative shall occur to determine if it is appropriate for the agency to participate and support the FOSC.
- 2. If participation in the response is appropriate, a request for funding shall be made to the FOSC. Initially, the request can be made orally but must be quickly followed by a written request.
- 3. The funding request shall include anticipated tasks, estimated costs, and the total amount of funding needed for the duration of the response.
- 4. Authorization comes from the FOSC in the form of a signed and dated Pollution Removal Funding Authorization (PRFA). The PRFA includes the activities to be funded, the amount of money

available, and an FPN. The FPN must appear on all incident documentation. The signed PRFA is used as agency authorization to invoice the NPFC for reimbursement of response costs.

- 5. It is necessary to fully document all costs associated with authorized response expenditures. Records must include salaries and benefits, daily transportation costs, individual per diem, authorized overtime costs, material costs, equipment costs (owned or rented), and authorized contractor costs.
- 6. If at any time during the response, it appears that the agency will exceed the PRFA ceiling, there must be an IMMEDIATE written request to the FOSC to increase the ceiling. The request must include detailed activities and costs. If an increase is approved, the FOSC will issue an amendment to the PRFA.

The NPFC User Reference Guide (eURG) is available online at USCG, NPFC website.

6300 - COST

#### 6310 – Cost Recovery

6310.1 - Federal

The National Pollution Fund Center is responsible for cost recovery of Oil Spill Liability Trust Fund funds.

6310.2 - State

ADEC is responsible for cost recovery of Oil & Hazardous Substance Release Prevention and Response Funds (OHSRPRF). ADEC will participate with the Department of Law in cost recovery agreement negotiation. Each participating agency will receive written notification of its responsibility under the cost recovery process. AS 46.08.020 requires that:

- a) Money recovered or otherwise received from parties responsible for the containment and cleanup of oil or a hazardous substance at a specific site, excluding funds for performance bonds and other forms of financial responsibility held in escrow pending satisfactory performance of privately-financed response action; and
- b) Fines, penalties, or damages recovered for costs incurred by the state because of the release or threatened release of oil or a hazardous substance shall be deposited in the general fund and credited to the special account called the "oil and hazardous substance response fund."

As such all monies shall be collected and deposited by the Department of Law/ADEC.

Cost Recovery Direct from Responsible Party: In cases of cost recovery direct from the responsible party, each participating agency may be required to provide documentation to the liable party and to ADEC for cost recovery. Written notification of procedures shall be provided by ADEC to each participating agency. Each agency shall be required to maintain records related to the cost recovery process. Specific record keeping requirements shall be outlined in writing by ADEC to each participating agency but shall include at a minimum:

- Expenditures Incurred
- Expenditures Submitted for Cost Recovery
- Expenditures Recovered

Cost Recovery through Litigation: In cases of cost recovery through litigation, each participating agency may be required to provide documentation to the Department of Law and to ADEC for cost recovery. Written notification of procedures shall be provided by ADEC to each participating agency.

# <u>6320 – Cost Documentation, Procedures, Forms & Completion Report</u>

6320.1 - Federal

All federal cost documentation, procedures and forms can be accessed at the NPFC website: Regulation/Guidance - <a href="https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/URG/">https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/URG/</a> Forms - <a href="https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Forms/">https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Forms/</a>

#### 6320.2 - State

**Fund Expenditures:** Activation of a multi-agency State response organization will occur when there is a major or extended incident. Many responses contain emergency elements which must be addressed immediately, and ongoing operations for which use of the Oil and Hazardous Substance Release Prevention and Response Fund (OHSRPRF) may be planned. Therefore, each participating agency should be aware of, and comply with, its policies and procedures for financial and accounting issues, and must be aware of emergency exceptions to its policies, procedures, and constraints for reimbursement from the OHSRPRF. Failure to comply with requirements for expenditures from the OHSRPRF shall preclude reimbursement of expenditures.

Expenditures made directly from or reimbursed from the OHSRPRF will have unique tracking requirements for both legislative reporting and cost recovery documentation. Due to the multi-agency involvement in ICS, it is important that all agencies understand the documentation and reporting requirements prior to obligating funds.

- 1) ADEC ADEC shall expend and obligate money directly from the OHSRPRF. ADEC shall be responsible for a consolidated report on expenditures reimbursed from the OHSRPRF for initial response, cleanup, and recovery operations at the conclusion of the incident. The report shall address items required in agency reporting requirements, below.
  - Under AS 46.08.045, the Commissioner can access the response fund for an oil or hazardous substance discharge when it is a declared disaster, or if there is no declared disaster, by providing proper notice to the governor and legislature.
- 2) Other Agencies Other State agencies should only incur obligations and expenditures after receiving a request for involvement and work plan approved by the State On-Scene Coordinator (SOSC). Obligations and expenditures not requested by the SOSC will not be reimbursed from the OHSRPRF.

Other agencies may seek reimbursement from the OHSRPRF by one of two methods: Inter-Departmental Accounting Journal Entries (AJE's) or Reimbursable Services Agreements (RSA's). In both cases, supporting documentation requirements may be in excess of standard State requirements. Thus, agencies should carefully review supporting documentation requirements. Requests for reimbursement shall be reviewed against OHSRPRF requirements and shall not be approved unless the documentation requirements have been met.

This reimbursement process may be amended if a cost recovery agreement is negotiated with a responsible party that adds or changes reporting requirements. ADEC shall provide written notification to all participating State agencies in such a case.

3) University of Alaska - Documentation requirements and access to the OHSRPRF for the University of Alaska has the same standard documentation and reporting requirements as other agency involvement, but reimbursements shall be through a general warrant.

## **Fund Expenditure Methods**

Inter-Departmental Accounting Journal Entries - The document shall include:

- □ Transaction Screen Printout
- ☐ Audit Trail Printout, Showing Expenditures
- □ Copies of Invoices, Procurement Documentation, Travel Documentation, Time Sheet, Warrant Register
- □ Narrative justification for the expenditure that addresses the specific reason for each expenditure as it relates to the approved work plan for that agency
- Other information to aid ADEC in the approval process
- □ Other information to aid ADEC in the cost recovery process
- □ Name and telephone of agency contact for additional information

All inter-agency accounting journal entries shall be approved by the SOSC or his/her designee prior to authorization and certification by ADEC.

Reimbursable Services Agreements (RSA's) - The execute document shall include:

- □ Transaction Screen Printouts
- □ Audit Trail Showing Expenditure
- □ Copies of Invoices, Procurement Documentation, Travel Documentation, Time Sheet, Warrant Register
- □ Narrative justification for the expenditure, addressing specific reasons for each expenditure as they relate to the agency's approved work plan
- Other information to aid ADEC in the approval process
- Other information to aid ADEC in the cost recovery process
- □ Name and telephone of agency contact for additional information

All RSA additions, executions, and amendments shall be approved by the SOSC or his/her designee prior to authorization and certification by ADEC.

Required Reports - All agencies shall be required to file reports on expenditures reimbursed from the OHSRPRF at the conclusion of their involvement in the response. The report shall address the following topics:

- Work Plan and Accomplishments
- Personal Services Expenditures by Name, PCN, Total Compensation and Services Performed
- □ One Time Purchases >\$10,000
- □ Contractual Agreements >\$20,000
- Equipment Purchases

<u>Accounting</u>: Accounting functions (AKSAS) will rarely be located onsite. All agencies must use a unique accounting structure (such as ledger code, program code) or other tool to identify all expenditures by specific ICS project.

ADEC must receive written notification from each participating agency of the accounting structure being used to capture its authorization, obligations and expenditures. AKSAS Transactions for Inter Departmental AJE's for reimbursement by ADEC should be sent to ADEC RD 18128. AKSAS transactions

for Reimbursable Services Agreement (RSA) executions, additions, and amendments for reimbursement by ADEC should be sent to ADEC RD 18128.

The State of Alaska maintains reimbursable petty cash accounts for small purchases (usually less than \$100.00). The balance of these accounts is normally under \$100.00. Field Warrants are used in situations that require immediate payment. They are limited to a maximum of \$1,000.00. Any amount over \$1,000.00 should be paid with an AKSAS generated general warrant.

# Personnel/Payroll - Responsible Agency: DOA

Personnel and payroll actions are governed by the various collective bargaining agreements, Personnel Rules, and the State Administrative Manual, as well as individual departmental policies and procedures. In an initial activation of a multi-agency ICS, the Department of Administration shall take the lead role in establishing a core group, which will consist of one or more representatives from each of the following agencies:

- o Department of Administration
- Division of Personnel
- Division of Labor Relations
- o Division of Finance
- o Department of Environmental Conservation
- All other State agencies with employees assisting in the cleanup efforts

The core group will address the following issues and any other issues as they arise to ensure consistency between departments:

- Overtime eligibility for Fair Labor Standards Act (FLSA) exempt employees
- Modifications to collective bargaining agreements through Letters of Agreement
- Time reporting form modifications to address unique reporting requirements of the incident
- ☐ Establishment of record keeping policies and procedures for volunteer corps
- □ Assist in position classification and hiring for large numbers of emergency hires and non-permanent staff, agency guidance and assistance. This assistance will be available to all agencies, but agencies may choose to follow the existing procedures without this assistance.
- □ Assist the Finance/Administration Section Chief in the hire and training of personnel/payroll staff to remain on site.

ADEC shall review each agency's equipment purchases and make a determination of equipment, which shall be required for the emergency response. The agency shall relinquish that equipment to ADEC for transportation to a local response conex. The balance of equipment shall remain in the sole possession of the purchasing agency. The agency shall not be required to reimburse the OHSRPRF for equipment, which ADEC does not require for emergency response.

## <u>Documentation</u> - Responsible Agency: ALL/ADEC/LAW

Minimum Requirements - Each agency shall immediately implement document control and collection procedures. In all cases telephone logs, correspondence, reports, time records, and field notes shall be considered part of documentation. Numerical document control by all participating agencies and a mechanism for centralized document control and retention shall be instituted at the agency level. All staff shall be subject to a "Check in - Check Out" process through the Resource Unit of the Planning Section to ascertain that vital records are retained onsite.

Additional Requirements - Additional documentation and data management requirements shall vary by incident. ADEC, in conjunction with the Department of Law, shall establish the documentation and data management requirements for each incident. Attention shall be paid to cost recovery requirements. Each participating agency shall be provided written instructions by ADEC for documentation requirements in excess of minimums.

# 6320.3 – National Pollution Fund Center Technical Operating Procedures

Utilize the following link for access to the NPFC Technical Operating Procedures (TOPS): <a href="https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Publications/tops/">https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Publications/tops/</a>

6320.4 - Finance and Resource Management Field Guide - TBD

## 6330 – Reimbursable Expenses

6330.1 – Procedures for Reimbursement

For reimbursement under the Oil Spill Liability Trust Fund, Reference the <u>Compensation/Claims</u> section of this document.

For local government reimbursement under the Comprehensive Environmental Response, Compensation and Liability Act, follow this link for information: <a href="https://www.epa.gov/emergency-response/local-governments-reimbursement-program">https://www.epa.gov/emergency-response/local-governments-reimbursement-program</a>

#### 6340 - Liability Limits

Limits of Liability as defined by OPA 90 are outlined in 33 CFR 138, Subpart B.

6400 - TIME - TBD

6500 - COMPENSATION/CLAIMS

#### 6510 - Claims against the OSLTF

Guidance for submitting a claim under the Oil Spill Liability Trust Fund can be found at the following link: <a href="https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Claims/">https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Claims/</a>

## 6520 - Compensation for Injury Specialist (INJR) - TBD

6530 - Claims Specialist (CLMS) - TBD

6600 - PROCUREMENT

## <u>6610 – Contracting Officer Authority</u>

6610.1 - Federal

Federal contract authority for spill response falls under the Federal On scene Coordinator duties. Further guidance on this topic is found at the following link: <a href="https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Response/">https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/Response/</a>

6610.2 - State

Responsible Agency: DOA

Agencies are cautioned that procurement actions are governed by AS 36.30, the State of Alaska Administrative Manual, 2 AAC 12, Departmental Delegated Purchasing Authority Memoranda, as well as individual departmental policy and procedures.

In an initial activation of the multi-agency ICS, the Department of Administration shall establish an on-scene Procurement Office, using the designated contract support team (DCST); reporting to the Finance/Administration Section Chief. The Logistics Section Chief will work with the Procurement Office to ensure accounting practices and procedures are followed for all transactions.

# Primary activities shall be to:

- Establish written term contracts for services.
- □ Eliminate State liability from verbal contracts through public notices.
- ☐ Assess and establish leases for office and other space.
- □ Provide assistance, as needed, to all participating agencies in contracting, emergency procurement, and reporting.
- ☐ Establish systems to provide adequate internal controls and communication between the finance procurement unit and the logistics supply unit.
- □ Coordinate with ADMVA/DHSEM and DOT/PF and Logistics to ensure ground transportation requirements are met.
- □ Assist in hiring and training staff for procurement functions.

6700 - RESERVED

6800 - RESERVED

6900 - RESERVED FOR AREA/DISTRICT

#### 7100 - INTRODUCTION

This chapter profiles the hazards associated with extremely hazardous substances (EHS) in Alaska. It identifies the substances, where they are found, how they are transported, the risks they pose to the public, and the current capability of industry and government to respond to large-scale accidents.

EHS, for the most part, are those substances that pose an acute inhalation threat to humans. The distribution of EHS in Alaska falls into relatively distinct and predictable patterns. Hydrogen sulfide gas occurs only in association with crude oil production. Chlorine is found primarily at the municipal water and wastewater treatment facilities and seafood processing facilities of coastal southcentral and southeastern Alaska, as well as larger municipal facilities on the highway system. Anhydrous ammonia is found typically in coastal communities with seafood processing facilities. Sulfuric acid occurs at major industrial facilities and at remote communications facilities (as a battery electrolyte), and sodium cyanide is typically located at mining operations and transport facilities. Many of the more exotic substances occur at a small number of industrial or trans-shipment facilities.

Major routes and modes of transportation of EHS into and around the state are relatively simple. Interstate transport of EHS consists nearly exclusively of transport of substances into the state from the southern contiguous states by water. With a scattered and largely rural population, the potential for an accidental EHS release with catastrophic consequences – for example, affecting over 1,000 persons – in Alaska is confined to a handful of population centers. On the other hand, release consequences could still be great in many Alaskan communities when evaluated in terms of the percentage of a community's population affected and the degree of impact.

Response to an EHS release can be either defensive or offensive in nature. Defensive response measures include detecting a release, notifying the public and appropriate agencies, predicting plume movement, and protecting the public through evacuation or shelter-in-place tactics. Key to effective defensive response is a local emergency plan to guide the effort. A degree of defensive response capability exists in Alaska communities as evidenced by the existence of local emergency response plans in most communities.

Offensive response includes monitoring chemical concentrations and entering hazard zones to accomplish rescue, control, decontamination or other objectives. Key to effective offensive response is a well-trained, equipped and practiced Hazmat team. Such teams, though, are expensive to equip and train, and maintaining a level of proficiency commensurate with the risk to responders is costly. The Hazmat response teams of the Municipality of Anchorage, the 103rd Civil Support Team WMD (Alaska National Guard), and the City of Kodiak provide a degree of offensive response capability for their respective locales.

Areas with substantial risk and no or limited offensive response capability include the Kenai Peninsula Borough Planning District, the Aleutians East and Aleutian and Pribilof Planning Districts, the Bristol Bay Planning District, and the Northwest Arctic Borough Planning District.

## 7110 - Overview of Chemical Hazards

This section discusses chemical hazards in general and those in Alaska particularly. It is intended to provide some background for readers that may not be familiar with the hazards posed by EHS.

1) Release and Dispersion Mechanics: EHS in Alaska include compressed and refrigerated gases, liquids and solids. The ways in which each is released and disperses in the environment differ.

**Gases:** Compressed and refrigerated gases can be released directly into the environment and spread under the influence of meteorological conditions. The rate at which a compressed gas is released depends on such factors as the amount of the substance in the container, the temperature of the substance, and the size of the hole through which the gas escapes. Once released, compressed gases spread in a downwind direction under the influence of meteorological conditions and gravity. The spread of compressed gases is particularly sensitive to wind speed. The slower the wind speed, the further high concentrations of gases will reach.

**Liquids:** Liquids are normally assumed to be dispersed into the atmosphere through evaporation. The evaporative rate is largely a function of chemical properties, the temperature of the liquid, and the surface area of the pool. The rate of release of liquids to the atmosphere through evaporation at normal temperatures is usually much slower than that for compressed gasses. As a result, even highly toxic liquids are far less likely to cause off-site impacts than the compressed gasses, provided the liquids are released and remain at ambient temperatures.

It is important to note that heating toxic liquids as a result of fire or other chemical reactions can dramatically increase release rates and downwind impact distances. Highly reactive liquids, such as strong acids, react with many substances while generating heat, which increases evaporative rates. Chemical reaction of liquids with substances in the environment upon release can also produce toxic gases as products of reaction. Under certain conditions, liquids can also be introduced into the environment as fine aerosols, which behave much like gases.

**Solids:** Finely divided solids can be released by explosion or other physical means and may disperse much like gases. Like liquids, solids can also react with other substances to release toxic gases.

2) **Causes of Releases:** Causes of chemical accidents in Alaska are expected to mirror causes reflected in nationwide records. In a general sense, causes of most chemical accidents fall into three primary (but not entirely distinct) categories: human error, fire, and natural disasters.

**Human Error:** The single greatest cause of chemical releases reflected in nationwide records is, directly or indirectly, human error. Inadequate training, lapses in judgment, and inadequate number of personnel appear repeatedly in the records as the cause of chemical accidents. The statistic suggests that the frequency of accidental releases is directly proportional to the level of human judgment and opportunity for mistakes. There is every reason to expect that the prevalence of human error as a cause of chemical accidents will apply in Alaska.

**Fire:** Fire is also a common, and in some ways a problematic, cause of releases. In closed systems, such as pressure vessels or refrigeration systems, increases in temperatures cause increases in internal pressure. To reduce the risk of explosion, most closed systems are equipped with some form of pressure relief device that will vent all or some of the system contents in the event of over-pressurization. Extreme temperatures associated with fires can be expected to result in the release of gases via these pressure relief devices.

For liquids, heat produced by fires increases vapor pressures and the rate at which liquids are released into the air. Fires can also produce or accelerate chemical reactions whereby toxic substances are created and dispersed. It is important to note that most plume models do not simulate the effects of fire and other chemical reactions.

One characteristic of fire, on the other hand, tends to reduce the effects of fire-associated releases. Produced heat forms strong vertical air currents that disperse emissions vertically, as opposed to horizontally along the ground surface.

**Natural Disaster:** Other causes of accidental chemical releases include natural phenomena such as earthquakes, and floods. With its active seismic zones, earthquakes may be a more likely cause of chemical releases in Alaska. Natural disasters can result in situations that exceed those contemplated in normal emergency planning.

3) Accident Frequencies: The expected frequency of accidental chemical releases on a unit basis will be higher in Alaska than on a national basis. Factors that will tend to increase the likelihood of a release include extreme environmental conditions, improper training, and lack of regulatory oversight.

**Fixed Facilities:** The Handbook of Chemical Hazard Analysis Procedures (Federal Emergency Management Agency - FEMA et al, 1990) presents an approach for estimating the likelihood of releases from facilities. In formulating the approach, FEMA suggests that the frequency of significant accidents is largely a function of the number of containers, and whether the containers are in use or in storage: Primarily due to the potential for fire damage, FEMA concludes that the frequency of accidents is ten times greater for containers in warehouses and other storage facilities than for containers at medium size industrial facilities such as water treatment plants. FEMA also concludes that accident frequency varies directly with the number of containers – the more containers, the higher the likelihood of an accident.

The handbook suggests a failure rate for water treatment plants and other medium size industrial users of 1 x  $10^{-4}$  failures per storage tank or pressure vessel per year. For warehouses and other storage facilities, the handbook suggests a failure rate of 1 x  $10^{-3}$  failures per storage tank or pressure vessel per year. While valve and piping leaks are far more common than container failures, such operational leaks are often detected and are often of a magnitude that does not pose a threat beyond the facility and immediate working environment. As a result of the limited number of containers present at individual facilities in Alaska, the expected frequency of container failure at any single facility should never exceed  $1 \times 10^{-2}$  per year.

**Bulk Marine Transport:** The Handbook of Chemical Hazard Analysis Procedures (FEMA et al, 1990) states that marine transportation has the lowest accident rate per ton-mile and the lowest number of accidents of the various modes of transportation. The large energies involved when accidents do occur, however, can result in large cargo losses. The handbook estimates spill frequency for bulk marine transport based on the likelihood of vessel accidents per mile traveled or per port call. Suggested accident frequencies vary from  $1 \times 10^{-3}$  per mile for collisions and groundings in harbors and bays to  $5 \times 10^{-6}$  per mile for groundings on lakes, rivers and intercoastal waterways. Of the accidents involving single-hulled vessels, 25 percent can be expected to result in releases, and of these, 30 percent can be expected to result in the loss of 100 percent of one tank or compartment. This suggests large-scale releases may occur at a frequency of  $7.5 \times 10^{-5}$  to  $3.75 \times 10^{-7}$  per mile traveled.

**Bulk Rail Transport**: The Handbook of Chemical Hazard Analysis Procedures (FEMA et al, 1990) estimates spill frequency for bulk rail transport based on the likelihood of accidents per rail car-mile. The handbook

suggests a frequency for mainline accidents of 6 x  $10^{-7}$  per car-mile and a frequency for yard accidents of 3 x  $10^{-6}$  per car-mile. Of the accidents, the handbook suggests that 30 percent can be expected to result in complete loss of cargo. This yields a frequency for large-scale releases from mainline accidents of 1.8 x  $10^{-7}$  per car-mile and 9 x  $10^{-7}$  per car-mile for releases from accidents in rail yards.

**Bulk Truck Transport:** The Handbook of Chemical Hazard Analysis Procedures (FEMA et al, 1990) estimates spill frequency for bulk truck transport based on the likelihood of truck accidents per mile traveled, and the percentage of those accidents that result in a release of some or all of the contents. The handbook suggests use of an average accident rate of 2 x  $10^{-6}$  accidents per mile for trucks carrying bulk quantities of hazardous materials. The method suggests that accidents result in spills 20 percent of the time, and of those, 20 percent will result in release of the entire cargo. Considering all factors, the handbook suggests that accidents will result in release of the entire contents at a rate of 8 x  $10^{-8}$  per mile traveled per year.

- 4) Release Consequences: While releases of chemical substances can certainly affect the environment, release consequences are most often evaluated in terms of human injury and loss of life. If this standard is used, it is understood that the most severe consequences are associated with releases in highly populated areas. With a scattered and largely rural population, the potential for catastrophic consequences for example, affecting over 1,000 persons in Alaska is confined to a handful of population centers. On the other hand, release consequences evaluated in terms of the percentage of a community's population impacted and the degree of impact could still be great in many Alaskan communities.
- 5) **Risk:** Risk is normally considered a function of both the likelihood of a release, and the severity of the consequences. Risk is greatest where a release is most likely to occur and the consequences would be most severe the least where releases are highly improbable, or even if one were to occur, impacts would be minor. In a general sense, chemical risk in Alaska is not nearly as high as many parts of the nation. Nevertheless, many Alaskan communities are faced with some degree of chemical risk.

#### 7200 - OPERATIONS

## 7210 – HAZMAT Response

INITIAL NOTIFICATION OF RESPONSE AGENCIES: All hazardous material (hazmat) releases in excess of the reportable quantity (RQ) must be reported by the responsible party to the National Response Center. Any release regardless of the amount is required to be reported to the State of Alaska, Department of Environmental Conservation (ADEC). Upon notification of a release, the NRC shall promptly notify the appropriate Federal On-Scene Coordinator (FOSC). The FOSC shall contact the ADEC State On-Scene Coordinator (SOSC). If ADEC receives notification first, the SOSC shall notify the FOSC promptly. An emergency notification list is provided at the front of the Response Section to this plan. The FOSC and the SOSC will relay the notification to local communities, resource agencies, medical facilities, and others as necessary and begin coordination with a Local On-Scene Coordinator (LOSC) if the incident poses an immediate threat to public health and safety.

As long as there is an immediate threat to public safety, LOSC serves as the ultimate command authority if the FOSC or SOSC does not assume the lead role for the response or the LOSC request a higher authority to assume that responsibility. LOSC can at any time request higher authority to assume command and control of an incident. Local emergency plans should be consulted for any specific directions or guidelines. The local fire department and/or the Local Emergency Planning Committee should have the most current

records on local storage of hazardous materials that are in quantities that meet federal reporting requirements.

RECOGNITION: The recognition of chemical or physical hazards is essential to dealing with a release safely. Chemical and physical hazards may be confronted by emergency response personnel when responding to a hazardous material incident. Chemical hazards include biological, radioactive, toxic, flammable, and reactive hazards. Physical hazards include slips, trips and falls, materials handling, thermal, electrical and noise hazards, and confined spaces.

Once a hazardous material has been identified it is important to determine the hazards and properties. Thousands of substances exhibit one or more characteristics of flammability, radioactivity, corrosiveness, toxicity, or other properties which classify them as hazardous. For any particular hazardous category, the degree of hazard varies depending on the substance.

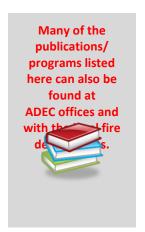
The degree of hazard is a relative measure of how hazardous a substance is. For example, the Immediately Dangerous to Life and Health (IDLH) concentration of butyl acetate in air is 10,000 parts per million (ppm); the IDLH for tetrachloroethane is 150 ppm. Tetrachloroethane is therefore far more toxic (has a higher degree of hazard) when inhaled in low concentration than butyl acetate. Vapors from butyl acetate, however, have a higher degree of explosive hazard than tetrachloroethane vapors which are not explosive.

Once the substance(s) has been identified, the hazardous properties and degree of hazard can be determined using reference materials. Chemical properties and the health hazards associated with the various materials transported in the Prince William Sound (PWS) area region can be found in the U.S. Coast Guard (USCG) CHRIS Manual, the Department of Transportation (DOT) Hazardous Materials Emergency Response Guidebook (current edition), and CAMEO (Computer-Aided Management of Emergency Operations) computer programs. Industry experts can be consulted as well. An excellent resource is the CHEMTREC 24-hour information number, 1-800-424-9300, supported by the Chemical Manufacturers Association. Additional references are provided below.

Although appropriate references give information about a substance's environmental behavior, additional field data will likely be required. Most frequently, air monitoring and sampling are needed to verify and identify the presence of hazardous materials, to calculate concentrations, and to confirm dispersion patterns.

# Available references (with several websites) for hazmat and response organization information:

- The Regional Contingency Plan
- Commandant Instruction #16465.30
- National Contingency Plan (40 CFR part 300)
- The Alaska Incident Management System (AIMS) Guide (November 2002 Revision 1)
  - www.dec.alaska.gov/spar/perp/docs/AIMS Guide-Complete(Nov02).pdf
- Coastal Sensitivity Atlas
- USCG CHRIS Manual
- DOT Emergency Response Guidebook (current edition)



#### www.phmsa.dot.gov/hazmat/training/publications

- CHEMTREC, Chemical/Hazardous Substance information, 1-800-424-9300
- Sax's Dangerous Properties of Industrial Materials
- International Maritime Dangerous Goods Codes
- Safety Data Sheets <u>www.hazard.com/msds/index.php</u>
- NFPA Fire Protection Guide On Hazardous Materials (current edition)
- NIOSH/OSHA/USCG/EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities. Also, the NIOSH/OSHA Pocket Guide Book <a href="https://www.cdc.gov/niosh/npg/npg.html">www.cdc.gov/niosh/npg/npg.html</a>
- Hart Crowser, Inc., 1999. <u>1998 Statewide Hazardous Material Inventory</u>. Prepared for ADEC, Division of Spill Prevention and Response.
- Hart Crowser, Inc., 1999. <u>Alaska Level A and B Hazardous Material Response Resources</u>. Prepared for ADEC, Division of Spill Prevention and Response.
- Hart Crowser, 2000. <u>Evaluation of Chemical Threats to the Alaska Public</u>. Prepared for ADEC, Division of Spill Prevention and Response.
- <u>Statewide Hazardous Materials Commodity Flow Study</u>, Nuka Research and Planning Group, 2010.
   Prepared for ADEC and the Alaska Department of Military and Veterans Affairs (DMVA).
   <u>www.dec.alaska.gov/spar/perp/hazmat/study.html</u>
- Oil and Chemical Response Reference Library at Sector Anchorage. This library consists of a Macintosh Computer System with CAMEO, plus all of the publications listed above. A complete library listing is maintained and updated as new/revised publications/programs are received.
- Spill Tactics for Alaska Responders Manual, April 2006. Describes the various levels of protection (Levels A, B, C, and D for hazardous materials response).
- www.dec.alaska.gov/spar/perp/star/index.htm.

EVALUATION: To properly evaluate a hazardous materials release, the incident must be characterized. Incident characterization is the process of positively identifying the substance(s) involved and evaluating the actual or potential public health and environmental impacts. Characterizing a hazardous substance incident is generally a two-phase process, an initial characterization followed by a more comprehensive characterization.

**Initial Characterization**: The initial characterization is based on information that is readily available or can be obtained fairly rapidly to determine what hazards exist and if immediate protective measures are necessary. During this initial phase, a number of key decisions must be made regarding:

- Imminent or potential threat to public health.
- Imminent or potential threat to the environment.
- Immediate need for protective actions to prevent or reduce the impact.
- Protection of the health and safety of response personnel.

If the incident is not immediately dangerous to human life or sensitive environments, more time is available to evaluate the hazards, to design plans for cleanup, and to establish safety requirements for response personnel. Information for characterizing the hazards can be obtained from on-scene intelligence (records, placards, eye witnesses, etc.), direct-reading of instruments, and sampling. Depending on the nature of the incident and the amount of time available, various combinations of this information gathering process are used. The following outline describes an approach to collecting data needed to evaluate the impact of a hazardous materials incident.

- ➤ An attempt should be made to gather as much information as possible, such as:
  - Description and exact location of the incident
  - Date and time of occurrence
  - Hazmats involved and their physical/chemical properties
  - Present status of incident
  - Potential pathways of dispersion
  - Habitation population at risk
  - Environmentally sensitive areas endangered species, delicate ecosystems
  - Economically sensitive areas industrial, agricultural
  - Accessibility by air, roads and waterways
  - Current weather and forecast (next 24 to 48 hours)
  - Aerial photographs/video when possible
  - A general layout and mapping of the site
  - Available communications
  - ➤ Off-site reconnaissance (that can be conducted in Level D) should be the primary inspection for initial site characterization when the hazards are largely unknown or there is no urgent need to go on-site. Off-site reconnaissance consists of visual observations and monitoring for atmospheric hazards near the site. Collecting of off-site samples may identify substance migration or indicate on-site conditions. Off-site reconnaissance would include:
  - Monitoring ambient air with direct-reading instruments for:
    - o Organic and inorganic vapors, gases, and particulates
    - Oxygen deficiency
    - o Specific materials, if known
    - o Combustible gases and radiation
  - Identifying placards, labels, or markings on containers or vehicles
  - Noting the configuration of containers, tank cars, and trailers
  - Noting the types and numbers of containers, tank cars, trailers, buildings, and impoundments
  - Identifying any leachate or runoff
  - Looking for biological indicators dead vegetation, animals, insects or fish
  - Noting any unusual odors or conditions
  - Observing any vapors, clouds, or suspicious substances
  - Taking off-site samples of air, surface water, ground water (wells), drinking water, site runoff, and soil
  - Reviewing the Dangerous Cargo Manifest
  - Conducting interviews with workers, witnesses, observers, or inhabitants
- An on-site survey (conducted in a minimum of Level B protection until hazards can be determined) may be necessary if a more thorough evaluation of hazards is required. On-site surveys require personnel to enter the restricted or hot zone of the site. Prior to any personnel conducting an on-site survey, an entry plan addressing what will be initially accomplished and prescribing the procedures to protect the health and safety of response personnel will be developed. On-site inspection and information gathering would include:
  - Monitoring ambient air with direct-reading instruments for:
    - o Organic and inorganic vapors, gases, and particulates
    - Oxygen deficiency
    - o Specific materials, if known

- o Combustible gases and radiation
- Observing containers, impoundments, or other storage systems and noting:
  - o Numbers, types, and quantities of materials
  - o Condition of storage systems (state of repair, deterioration, etc.)
  - o Container configuration or shape of tank cars, trailers, etc.
  - o Labels, marking, identification tags, or other indicators of material
  - Leaks or discharges from containers, tanks, ponds, vehicles, etc.
- Noting physical condition of material:
  - Solids, liquids, gases
  - o Color
  - Behavior (foaming, vaporizing, corroding, etc.)
- Determining potential pathways of dispersion air, surface water, ground water, land surface, biological routes
- Taking on-site samples of storage containers, air, surface water, ground water (wells), drinking water, site runoff, and soil

# 1) Comprehensive Characterization

Comprehensive characterization is the second phase, a phase which may not be needed in all responses. It is a more methodical investigation to enhance, refine, and enlarge the information base obtained during the initial characterization. This phase provides more complete information for characterizing the hazards associated with an incident. As a continuously operating program, the second phase also reflects environmental changes resulting from any response activities.

Information obtained off-site and during the initial site entries can be sufficient to thoroughly identify and assess the human and environmental effects of an incident. But if it is not, an environmental surveillance program needs to be implemented. Most of the same type of information collected during the preliminary inspection is needed, but more detailed and extensive. Instead of one or two groundwater samples being collected, for instance, a broad and intensive groundwater survey may be needed over a long period of time.

Results from preliminary inspections provide a screening mechanism for a more complete environmental surveillance program to determine the full extent of contamination. Since mitigation and remedial measures may cause changes in the original conditions, a continual surveillance program can be used to identify and track fluctuations or ramifications.

EVACUATION: Neither USCG nor the EPA has the authority to order an evacuation of facilities or communities in the event of a release; this authority lies with local or state entities. However, evacuation should be strongly recommended to local civil authorities (police, fire departments, etc.) whenever a hazardous release poses a threat to surrounding personnel. With a release of hazardous materials, the area should be isolated for at least 100 meters in all directions until the material is identified. Only trained and properly equipped personnel should be allowed access.

Quick evacuation tables are located in the back of the DOT Emergency Response Guidebook. Evacuation should always begin with people in downwind and in low-lying areas. Continual reassessment is necessary to account for changes in weather wind, rate of release, etc. CAMEO should be used to provide an air plume trajectory model for downwind toxic plume distances. Again, constant reassessment will be required.

Issues concerning disaster assistance should be referred to Alaska DMVA's Division of Homeland Security and Emergency Management.

DIRECTION AND SITE/ENTRY CONTROL: The purpose of site control is to minimize potential contamination of emergency response personnel, protect the public from any hazards, and prevent unlawful entry onto the site which may result in an additional release of material, destruction of evidence, or prolong the cleanup effort. The degree of site control necessary depends on site characteristics, site size, and the surrounding community.

Several site control procedures should be implemented to reduce potential exposure and to ensure an effective, rapid cleanup is conducted:

- Secure site, and establish entry control points.
- Compile a site map.
- Prepare the site for subsequent activities.
- Establish work zones.
- Use the buddy system when entering.
- Establish and strictly enforce decontamination procedures.
- Establish site security measures.
- Set up communications networks.
- Enforce safe work practices.

For complete guidance on Direction and Site Entry/Control, refer to the NIOSH/OSHA/USCG/EPA Occupational Safety & Health Guidance Manual for Hazardous Waste Site Activities (Publication No. 85-115).

COMMAND AND CONTROL: As long as there is an immediate threat to public safety, a LOSC serves as the ultimate command authority if the FOSC or SOSC does not assume the lead role for the response or the LOSC request a higher authority to assume that responsibility. The LOSC can at any time request higher authority to assume command and control of an incident. All applicable local emergency plans should be consulted. After the LOSC, together with FOSC and SOSC, has determined that public safety is not at risk, then the Unified Command response organization will assume command and control of the incident.

Government response organization in the State of Alaska is based on the Unified Command structure of the Incident Command System (ICS), which is outlined in the AIMS Guide. The Unified Command brings together the FOSC, the SOSC, and the Responsible Party's Incident Commander (along with the LOSC if an immediate threat still exists to the health and safety of the local populace) into one governing unit. The RCP and the AIMS Guide provide details on the ICS and the Unified Command formations. The organizational structure and Hazmat team member duties and responsibilities for Hazmat response are also further described in the AIMS Guide, Appendix B.

COMMUNICATIONS: A communications plan for all sections of the ICS will be established by the Incident Commander.

At this time, a pre-established generic communications plan accounting for the various police, fire, federal, state, and local frequencies has not been established.

WARNING SYSTEMS & EMERGENCY PUBLIC NOTIFICATION: Three separate systems for broadcast of emergency messages are available to Alaska Regional Response Team, FOSC, and SOSC. These include the National Oceanic and Atmospheric Administration Weather Radio System, the State of Alaska Emergency Alert System, and the National Warning System. LOSC or the local emergency services should activate any system they have available through their community (e.g. community alert system).

HEALTH AND MEDICAL SERVICES: For hospital and clinic information refer to the *Community Profiles* of this plan.

#### 7210.1 – Radiological Response

**General:** The potential for a significant nuclear-related accident in the State of Alaska is remote. There are no active nuclear reactors in the State of Alaska and the quantities of nuclear materials transported within the state are insignificant in comparison to nuclear waste/cargo shipments in the Lower 48 states. However, Alaska's proximity to nuclear facilities (e.g., power plants, waste storage sites, and processing plants) in eastern Russia and seasonal weather patterns that could bring fallout over the state warrant concern, as well as preparedness on the U.S. side. Most of the Russian facilities are substandard in construction and have had a history of reported and unreported releases.

Two basic situations may occur following a radiological accident. In the case of a major catastrophic event with serious impact to the State of Alaska, the Governor may declare a disaster emergency, the State Emergency Response Plan would be activated, and the Alaska Department of Military and Veterans Affairs would be the lead agency. For non-declared emergencies, the Alaska Department of Environmental Conservation (ADEC) more than likely would serve as the lead agency under their hazardous materials response charter.

The National Response Framework (NRF), Nuclear/Radiological Incident Annex details the responsibilities of coordinating Federal agencies for nuclear/radiological incidents. These coordinating agencies include:

- Department of Defense (DOD) or Department of Energy (DOE), as appropriate, for incidents involving nuclear/radiological materials or facilities owned or operated by DOD or DOE; or for incidents involving a nuclear weapon, special nuclear material, and/or classified components under DOD or DOE custody.
- DHS, generally through Customs and Border Protection (CBP), for incidents involving the inadvertent import of radioactive materials as well as any other incidents where radioactive material is detected at borders.
- EPA or DHS/USCG, as appropriate, for environmental response and cleanup for incidents not otherwise covered above.
- DHS for all deliberate attacks involving nuclear/radiological facilities or materials, including radiation dispersal devices and improvised nuclear devices.

Basic Responsibilities of State and Federal Agencies:

- 1. Federal agency tasking is contained in the National Response Framework.
- 2. The Alaska Department of Military and Veterans Affairs (through the Division of Homeland Security and Emergency Management) will:
  - Implement the State Emergency Response Plan, if applicable.
  - \*Provide the designated State Coordinating Officer.
  - Receive communications from federal, state and local agencies.
  - \*Provide updates to the Governor and federal, state and local agencies through Situation Reports (SitReps).

- \*Provide a State Area Commander and lead staff for the State Emergency Coordination Center.
- Facilitate release of health advisory information and recommended population protection measures.
- \*Coordinate area evacuation if the situation warrants.

- 3. The Alaska Department of Environmental Conservation will:
  - Set up/participate in the Unified Command (non-disasters) and provide the State On-Scene Coordinator (SOSC).
  - Coordinate health advisories with the Alaska Department of Health and Social Services (ADHSS).
  - Coordinate and verify accuracy of actual and forecasted radiological contamination plume locations thru NOAA's National Weather Service satellite imagery and the University of Alaska's Geophysical Institute at Fairbanks.
  - Provide ADEC Air Quality staff and response team assistance, as requested by the State Coordinating Officer or the ADEC SOSC.
  - Alert the EPA Alaska Operations Office (if not previously alerted) and local communities that may be at risk. Coordinate response actions.
  - Determine areas within the State that are likely to receive airborne radiological contamination and establish a radiation-monitoring network. As a minimum:
    - Coordinate with EPA and determine local sample screening and analysis capability to expedite turnaround of sampling results.
    - Coordinate with the US Air Force, US Army, and US Navy for Department of Defense resources in Alaska and with the USCG and other federal agencies for their resources for establishing a monitoring network and data exchange.
- 4. The Alaska Department of Health and Social Services will:
  - Develop appropriate protective action guidelines for response to radiological releases. EPAdeveloped federal protective action guidelines may be used if deemed appropriate for the State of Alaska.
  - Coordinate health advisories with ADEC prior to release over statewide media networks.
  - Alert the US Food and Drug Administration and the US Nuclear Regulatory Commission of the potential for radiological contamination impacting the State of Alaska.
  - Advise the Unified Command on the potential health hazards resulting from the deposition of radiological contamination.
  - Maintain contact with rural health facilities and provide them with updated status reports.
  - Provide a representative to the Unified Command structure.
- 5. The Alaska Department of Labor and Workforce Development will:
  - Alert federal Occupational Safety and Health Administration (OSHA) officials.
  - Coordinate with ADHSS in determining OSHA standards for radiation exposure to emergency response personnel.
- 6. The Alaska Department of Fish and Game will:

<sup>\*</sup>Basic tasks under a declared disaster situation.

- In conjunction with the U.S. Department of Agriculture and other federal agencies, determine the impact of radiological hazards on fish and wildlife in the affected area.
- Advise the general public on any restrictions to commercial, sport, or subsistence fishing and hunting as a result of potential health hazards (from consumption of contaminated fish and wildlife).

**NOTIFICATION PROCEDURES**: Immediate notification of a radiological incident is critical to develop and implement the proper response strategy to protect the general populace. While existing international protocols outline a formal notification system through the International Atomic Energy Agency (IAEA), direct communication with the affected country will provide immediate information on the release. The existing lines of communication are described below. Additionally, the figure below provides a schematic flow diagram for notification.

- 1. **International Notification:** Currently, in the event of nuclear releases, which may threaten the United States, the U.S. State Department could be notified by the International Atomic Energy Agency (IAEA) **and/or** the country where the release has occurred.
- Federal Notification: The U.S. State Department notifies the Nuclear Regulatory Commission (NRC), which, in turn, notifies its regional offices, the National Response Center, the Department of Energy, Federal Emergency Management Agency, National Weather Service, and the State of Alaska.
- 3. State Notification: Within the State of Alaska, the Division of Homeland Security and Emergency Management (DHSEM) would receive the initial call from federal agencies. Upon receiving notification, DHSEM will notify the Governor and the Alaska Departments of Environmental Conservation and Health and Social Services. Additional notification responsibilities are also indicated under basic tasks for each State agency.
- 4. Local Notification: The State agency in charge of the radiological response will provide immediate notification to local elected officials for those communities, which may be at risk from the radiological hazard. In addition, Reference additional notification responsibilities indicated under basic tasks for each State agency.

## 7220 - Responsible Party Action

DISCOVERY AND NOTIFICATION: Any person in charge of a vessel or a facility shall report releases of hazardous materials in excess of the RQ as defined in Table 1 of 49 CFR 172.101 to the National Response Center (NRC) 24-hour telephone number, 1-800-424-8802, in accordance with NCP. Any release regardless of the amount is required to be reported to the State of Alaska. Notification to the state can be done by contacting ADEC either thru the Central Alaska Response Team at 269-3063 or through the 24-hour telephone number at 1-800-478-9300.

If direct reporting to the NRC is not immediately practicable, reports will be made to the Captain of the Port (COTP) PWS Marine Safety Unit Valdez at 835-7205, or duty officer cell phone at 831-0236. EPA's pre-designated FOSC may also be contacted through the regional 24-hour response telephone number at (206) 553-1263. All such reports shall be promptly relayed to the NRC.

# In any event, the person in charge of the vessel, vehicle, or facility involved in a hazardous material release shall notify the NRC and the State of Alaska as soon as

As much information as possible shall be reported. This will include, but is not limited to, the following:

- Location of the release
- Type(s) of material(s) released, including any pertinent Safety Data Sheet data
- An estimate of the quantity of material released
- Possible source of the release
- Date and time of the release
- Population and/or environment at risk.

REMOVAL ACTION: The responsible party shall, to the fullest extent possible, perform promptly the necessary removal action to the satisfaction of the pre-designated FOSC, SOSC and LOSC or local emergency services.

Regardless of whether or not a cleanup will be conducted, the responsible party shall cooperate fully with all federal, state, and local agencies to ensure that the incident is handled in a safe, proper manner.

## 7230 – State Action

AUTHORITY: ADEC is mandated by statute to respond promptly to a discharge of oil or a hazardous substance (AS 46.80.130). Additionally, ADEC may contract with a professional emergency response contractor or municipality in order to meet response requirements, and/or establish and maintain a containment and cleanup capability (i.e., personnel, equipment and supplies) (AS 46.09.040).

RESPONSE POLICY: ADEC is currently operating in accordance with an August 1992 policy decision which precludes ADEC personnel from responding to situations which require Level A/B protection. ADEC personnel are prohibited from responding with or using personal protective equipment beyond the Level C protection category (as defined in EPA standards).

STATE RESPONSE CAPABILITIES: The ADEC has entered into local response agreements with the Fairbanks North Star Borough, the Municipality of Anchorage, the City of Kodiak, the City and Borough of Juneau, and the City of Ketchikan. These teams (along with the  $103^{rd}$  Civil Support Team [CST] and EPA Emergency Response Team) comprise the Statewide Hazmat Response Team. In the event of an hazmat release requiring immediate response, ADEC pre-designated SOSC may request support from any of the Hazmat Response Teams. These teams maintain a Level A entry capability and can respond beyond their jurisdictional boundaries at the request of the SOSC. The teams are to be used strictly for emergency response operations. Once the immediate hazard is dealt with, the teams will be released to return to their home station. Post-response recovery operations will be handled by the responsible party (if known) or through ADEC response term contractors or federal contractors.

Another state asset is the 103<sup>rd</sup> CST, based at Kulis Alaska National Guard Base, Alaska. The 103<sup>rd</sup> CST can be requested through Alaska DMVA's Division of Homeland Security and Emergency Management, State Emergency Operation Center (SEOC: 428-7100 or 1-888-462-7100). The primary focus of the team is weapons of mass destruction, including chemical and biological warfare agents and toxic industrial chemicals. The 103<sup>rd</sup> CST maintains Level A entry capability and a wide variety of detection instruments

and support equipment. The team can be used in an advisory role for hazard modeling or medical assessment and in an assist mode to perform entries alone or in conjunction with other first responders.

RESPONSIBILITIES: During a hazmat incident, SOSC's anticipated and prioritized response objectives are as indicated below:

- **Safety**: Ensure the safety of persons involved, responding or exposed from the immediate effects of the incident.
- **Public Health:** Ensure protection of public health and welfare from the direct or indirect effects of contamination on drinking water, air and food.
- **Source Mitigation:** Ensure actions are taken to stop or reduce the release at the source to reduce/eliminate further danger to public health and the environment.
- **Environment:** Ensure protection of the environment, natural and cultural resources, and biota from the direct or indirect effects of contamination.
- **Cleanup:** Ensure adequate containment, control, cleanup and disposal by the responsible party or take over when cleanup is inadequate.
- **Restoration:** Ensure assessment of contamination and damage and restoration of property, natural resources and the environment.

**Cost Recovery:** Ensure recovery of costs and penalties to the Oil and Hazardous Substance Release Prevention and Response Fund for response containment, removal, remedial actions, or damage.

## 7240 - Federal Action

AUTHORITY: Section 311 of the Federal Water Pollution Control Act and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 are the principal authorities for federal response to discharges of oil and releases of hazardous substances. The procedures and standards for conducting responses are contained in NCP (40 CFR 300). Under the NCP and the RCP, each USCG COTP for coastal zones, or EPA representatives for inland zones, coordinates federal activities on-scene as either the pre-designated FOSC or as the first federal official in the absence of the pre-designated FOSC. The FOSC objective is to ensure rapid, efficient mitigation of actual or threatened pollution releases or discharges.

JURISDICTION: The NCP identifies USCG COTP for PWS (Commanding Officer, MSU Valdez) as the predesignated FOSC for the coastal zone, and EPA (Region 10 Alaska Operations Office) as the pre-designated FOSC for the inland zone. The FOSC will respond to hazardous substance releases, or threats of release, occurring in the coastal or inland zones and not involving U.S. Department of Defense vessels or facilities, which originate from:

- Vessels and vehicles (as well as other modes of transportation, e.g., railroad)
- Facilities, other than hazardous waste management facilities, when the release requires immediate action to prevent risk of harm to human life, health, or the environment.
- Hazardous waste management facilities, or illegal disposal areas, when the FOSC determines emergency containment or other immediate removal actions are necessary prior to the arrival of the EPA FOSC.

For all shore-side incidents in the coastal zone, once the immediate threat to human life, health, or the environment has been abated and the character of the response changes to a long-term cleanup or site remediation, the FOSC responsibilities will be transferred from USCG COTP to a designated EPA official.

LOSC would be the person in charge if there is an immediate threat to public health or safety. The LOSC may defer to the FOSC or SOSC.

RESPONSE POLICY: The USCG will follow the policy guidance contained in COMDTINST M16465.30, "Policy Guidance for Response to Hazardous Chemical Releases," and the Marine Safety Manual, Volume VI, Chapter 7 when responding to a hazardous chemical release. USCG Incident Management Handbook also provides guidelines for responding to hazardous substance release.

The USCG and other federal agencies in Alaska will maintain a "conservative" Level D response capability level. "Conservative" response consists of recommending evacuating the affected area and maintaining a safe perimeter while attempting to positively identify the hazmat and outlining a clear course of action. Federal personnel, with the exception of specialized teams (e.g., the National Strike Force and the Pacific

Strike Team, and the EPA START Team), will not enter a hazardous environment. Refer to the **RCP** for a description of the National Strike Force and other special forces.

In situations requiring an entry into a hazardous environment, federal agencies will rely on the capabilities of USCG Pacific Strike Team, EPA Emergency Response Teams, state and local hazmat response teams, if available, and industry or commercial resources.

In implementing this conservative response posture, COTP for the PWS will carry out all the FOSC functions not requiring entry of unit personnel into a hazardous environment. These functions include:

- Conducting preliminary assessment of the incident.
- Carrying out COTP measures such as restricting access to affected areas, controlling marine traffic (safety zones), notifying affected agencies, coordinating with state and local agencies, and assisting as resources permit.
- Conducting local contingency planning.
- Identifying responsible parties, and informing them of their liability for removal costs.
- Carrying out "first aid" mitigation if the situation warrants and capability exists.
- Monitoring cleanup activities.

CAMEO computer programs will be an important part of any chemical release incident. CAMEO chemical database with Codebreaker and Response Information Data Sheets modules provide a rapid means of identifying chemicals and their associated hazards. ALOHA (Areal Locations of Hazardous Atmospheres) air modeling program, part of CAMEO, provides a rapid means of developing a downwind hazard evaluation. The National Oceanic and Atmospheric Administration Scientific Support Coordinator will be the primary individual responsible for operating the CAMEO programs during a hazardous chemical release for the FOSC. Local fire departments and EPA also maintain CAMEO to assist in their response

Level D protection is primarily work uniform/coveralls, safety boots, safety goggles and a hard hat. This provides minimal protection. Level D must not be worn for "entry" into any hazardous materials situation. It does NOT provide protection from chemicals. Level D protection strictly applies to non-hazardous environments (e.g. Command Post, Cold Zone, etc.).



efforts. Programs for the ALOHA model need to be frequently updated to account for changing wind and weather conditions, source strength, and other variable conditions.

#### 7300 – HAZARDOUS SUBSTANCES AND PRODUCTS IN PRINCE WILLIAM SOUND AREA

This part provides general information on the location of extremely hazardous substances and other hazardous substances within the PWS area. PWS area includes the major communities of Valdez, Whittier and Cordova, and several other smaller communities. The Glenn, Richardson, and Edgerton Highways transect the region. Several inland communities plus Valdez are connected to this interior highway network which provides transportation routes to the larger communities of Fairbanks and Anchorage.

Several facilities within the area store and utilize chemicals categorized as extremely hazardous substances. Large quantities of flammable petroleum products, such as propane and gasoline, also are stored at several facilities within the area. Some facilities store and utilize compressed gasses. This section provides general information on the location of extremely hazardous substances within PWS area.

Under the requirements of Title III of the Superfund Reauthorization Act (SARA), the local fire department, as well as any Local Emergency Planning Committee, maintains records of reportable quantities of hazardous chemicals stored in the community, including their safety data sheets as reportable under the Tier II requirements of the SARA.

Chemical Inventory: In the compilation of 2011 Tier Two submissions, 42 facilities reported the

storage/use of Extremely Hazardous Substances (EHS) above the established reportable quantity.

Submission of the Tier Two Form is required by Title III of the Superfund Amendments And Reauthorization Act Of 1986, Section 312; Public Law 99-499, codified at 42 U.S.C. Section 11022. The purpose of the Tier Two Form is to provide State and local officials and the public with specific information on hazardous chemicals present at a facility during the past year. The State of Alaska Tier II Database can be accessed electronically at the following link: <a href="https://ready.alaska.gov/tierII/">https://ready.alaska.gov/tierII/</a>

Based on Tier Two reports contained in the CAMEO database, the most prevalent extremely hazardous substances in the region are:

- anhydrous ammonia
- sulfuric acid

Extremely hazardous substances are generally transported into the area from southern ports via water and delivered either direct to facilities or transported to facilities by truck over local road systems. Some substances may be shipped by air or come into the area aboard fishing-industry vessels.

**Chemical Risks:** This subsection identifies the hazards associated with the most common EHS present within the area in amounts greater than the federally-mandated threshold planning quantities. The properties of each substance and how they affect humans are discussed below. Ammonia poses the greatest threat out of all the EHS known to be present in the area.

Anhydrous ammonia is a colorless gas with a characteristic odor. The term "anhydrous" is used to distinguish the pure form of the compound from solutions of ammonia in water. Like chlorine, ammonia is neither explosive nor flammable, but will support combustion. Anhydrous ammonia readily dissolves in water to form an aqua ammonia solution. Anhydrous ammonia is considerably lighter than air and will rise in absolutely dry air. As a practical matter, however, anhydrous ammonia immediately reacts with

any humidity in the air and will often behave as a heavier gas. The chemical reacts with and corrodes copper, zinc and many alloys.

Anhydrous ammonia affects the body in much the same way as chlorine gas. Like chlorine, anhydrous ammonia gas is primarily a respiratory toxicant. In sufficient concentrations, the gas affects the mucous membranes, the respiratory system and the skin. In high concentrations it can cause convulsive coughing, difficult and painful breathing, and death. Anhydrous ammonia will cause burns if it comes in contact with skin or eyes.

Sulfuric acid is a dense, colorless, oily liquid. It is highly reactive with a large number of other substances and is readily soluble in water with release of heat. Fumes are released from the liquid through evaporation, and heat as a result of fire or other chemical reaction can significantly increase emissions. Both the liquid and its solutions will cause burns if allowed to come in contact with skin or eyes. Fumes are highly toxic, and reaction of the acid with a variety of substances can produce other toxic gases.

**Response Capability:** There are no Level A Hazmat Response Teams in PWS area. In the event of a hazardous substance release, ADEC should be contacted and they can activate the Statewide Hazmat Response Team. This formally agreed arrangement allows ADEC to request a Level A Hazmat team to respond to an event anywhere in the state,

In addition, several of the larger industrial facilities within the area are required to have Risk Management Plans for chemicals exceeding threshold quantities under 40 CFR Part 68 regulations. The Risk Management Plans contain emergency response plans for mitigating facility releases. Large bulk fuel production and storage facilities within the area also are required to maintain Facility Response Plans and specific levels of response equipment to mitigate oil releases in accordance 40 CFR Part 112.20 regulations.

The communities of Valdez, Cordova, and Whittier have developed and maintain local emergency management plans, or all-hazard plans, to respond to a variety of emergencies including hazardous substance releases.

**FACILITIES:** Table C-1 identifies the number of facilities that store and utilize hazardous substances. Local emergency responders receives copies of Tier Two inventory report from local facilities annually. If other emergency responders are deployed to the area, they should contact the local fire department to determine specific chemical hazards at a particular facility, based on Tier Two reports.

TABLE C-1 - Number of Facilities with Hazardous Substances

TABLE C-1 - Number of Facilities with Hazardous Substances					
SUBSTANCE	MAX AMOUNT	NUMBER OF			
	(pounds)	FACILITIES			
EXTREMELY HAZARDOUS SUBSTANCES <sup>1,2,3,4</sup>					
Anhydrous Ammonia	68,730	5			
Sulfuric Acid – Pure & Battery Electrolyte	90,602	18			
HAZARDOUS SUBSTANCES <sup>3,4</sup>					
Acetylene, Compressed Gas	1,899	4			
Aer-O-Lite 3% Green Foam	296,147	5			
Air, Compressed Gas	13,353	1			
Argon (75% Argon/25% CO <sub>2</sub> ), Compressed Gas	6,006	2			
Bionutrient 2170	39,432	1			
Brine	1,351,345	4			
Calibration Gases, Compressed Gases	1,096	1			
Cleartron ZB-258	13,344	1			
Corexit 9500 – Dispersant	86,955	1			
Corrosion Inhibitor WAW 5210 and CRW 9110	10,156	1			
Ethylene Glycol	281,796	1			
Ethylene Glycol Deice Fluid	15,810	1			
Flouroprotein Foam – National Aer-O-Foam	576,505	1			
Freon 22	900	1			
Helium, Compressed Gas	44	1			
Hydrogen Peroxide	77,802	1			
Hydrogen, Compressed Gas	11	1			
Hypochlorite Solution 12.5%	28	1			
Lead	27,245	2			
Lead Battery Plates	52,574	2			
Nitrogen	76,502	4			
Oxygen, Compressed Gas	2,989	4			
Paint and Thinners	23,492	1			
Phosphoric Acid, Solution 52%	9,000	1			
Propane, Liquid	192,475	4			
Sodium Hydroxide	400,445	1			
Therminol 66 Heat Transfer Fluid	13,382	1			
Transformer Oil	44,717	1			
Tritium Gas, DOT Class 7	1	1			
PETROLEUM PRODUCTS <sup>3,4</sup>		_			
Av Gas	26,000	1			
Aviation Turbine Fuel JP-5	130,000	1			
Crude Oil	2,311,000,000,000	1			
Diesel Fuel (Diesel #1 and #2)	15,483,515	21			
Fuel Oil, #1	29,040	1			
Gasoline	85,311	3			
Heating Oil, DOT Class 3	11,144	10			
Hydraulic/Lube Oils	332,965	2			
Jet A Fuel	37,400	1			
JC( A   UE)	37,400				

SUBSTANCE	MAX AMOUNT (pounds)	NUMBER OF FACILITIES
Jet B/JP-4 Aviation Fuel	65,000	1
Kerosene	151,800	3

#### Note:

- 1. The Emergency Planning and Community Right-to-Know Act of 1986 categorizes certain dangerous chemicals as EHS.
- 2. The above table summarizes EHS present above the associated threshold quantities as reported by facilities in the Prince William Sound Area on 2011 Tier Two forms. Facilities in other communities within the area may have these and other extremely hazardous substances at quantities below the EHS threshold quantities.
- 3. The Emergency Planning and Community Right-to-Know Act of 1986 requires facilities to report the presence of any chemical that has a Safety Data Sheet as administered by the Occupational Safety and Health Administration and is stored in amounts above certain threshold levels. In certain cases involving mining operations, facilities may be exempt from reporting under Mining Safety and Health Administration provisions.

**TRANSPORTATION:** EHS are normally delivered via air, water, and road to various facilities within the area. The following pages contain information from the Statewide Hazmat Commodity Flow Study conducted in 2010. The information provided is specific to the Prince William Sound area.

**RADIOLOGICAL: Radiological** risks in the PWS region are limited and in most cases would be localized to a very isolated area.

The most predominate source of radiological substances in the region are very small amount (grams in weight or less) used in industrial materials testing and the medical services.

**BIOLOGICAL:** Biological risks in the PWS region are also limited and in most cases would be localized to a very isolated area. The most likely source is public or municipal waste water treatment facilities located throughout the region and incidents involving a threat to public health and safety would be limited. Environmental impact would be localized and response would be initiated following standard level C or lower response methods.

Medical wastes are generated in the region and medical providers and transporters have rigorous procedures and policies regarding their storage and transport.

Paralytic Shellfish Poisoning is a common coastal threat. Additional information can be found at: <a href="http://www.epi.alaska.gov/id/dod/psp/ParalyticShellfishPoisoningFactSheet.pdf">http://www.epi.alaska.gov/id/dod/psp/ParalyticShellfishPoisoningFactSheet.pdf</a>

Terrorism threat in the PWS region are rare; however, domestic terrorist have transported real or suspected biological threats through the postal packaging services in Alaska. Response to these incidents are predominantly led by the Federal Bureau of Investigation with support from the Alaska National Guard 103red Civil Support Team.

#### 7400 - RESOURCES

#### 7410 – Manpower/Equipment

<u>The 2010 Hazmat Commodity Flow Study</u> noted serious deficiencies in the State's ability to respond to a hazardous materials incident. The limited offensive response capability is inadequate, and areas exist with significant risks and no response capability. Many of the Local Emergency Planning Committees are making progress towards defensive response capability by developing or maintaining viable local response plans.

Sources of Hazmat response personnel fell into relatively distinct categories depending on the type of organization. Municipal organizations draw their Hazmat personnel primarily from local fire departments. In most cases, Hazmat response is simply one function of the local fire department(s) -- along with firefighting, other forms of disaster management and emergency medical services. Fire department Hazmat personnel include both paid and volunteer members.

Federal organizations with Hazmat response capability draw members from defense installation fire departments. The military fire departments often include both military and civilian personnel.

Industry organizations with Hazmat response capability draw personnel from two areas: facility workers and industry fire departments. The single exception is Philip Environmental, which draws emergency response personnel from their pool of Hazmat site and tank workers.

#### 7410.1 - Federal

Reference the <u>Hazardous Materials Response Special Teams Capabilities and Contact Handbook</u> publication for information on federal hazmat responders.

Additionally, the USCG may call upon the Department of Defense's Alaskan Command (as a member of the Alaska Regional Response Team) to provide Hazmat response resources (teams and equipment) from Elmendorf Air Force Base and Eielson Air Force Base.

# 7410.2 - State

The Alaska Department of Environmental Conservation (ADEC) is mandated by statute to respond promptly to a discharge of oil or a hazardous substance (AS 46.08.130). The ADEC may contract with a person, business or municipality in order to meet response requirements, or may establish and maintain a containment and cleanup capability (i.e., personnel, equipment and supplies).

Presently, the ADEC has no Level A or B Hazmat response capability, although there is some possibility that ADEC response term contractors could be mobilized out of Anchorage in time to assist in certain Hazmat responses. The ADEC has some monitoring equipment in Anchorage and Fairbanks and there is some capacity for the agency to assist local or nearby response efforts by monitoring airborne contaminant levels.

As an alternative measure, the ADEC has negotiated response agreements with local communities to enhance oil and hazardous substance response capabilities using existing local resources. The ADEC will, in turn, reimburse the responding local community for expenses incurred during the response. Under the provisions of the local response agreement, the local community reserves the right to refuse an SOSC's request to respond based on local conditions and overall readiness capability.

The ADEC has formally entered into local response agreements with the Municipality of Anchorage (MOA) and the City of Kodiak whereby the local Hazmat team may elect to respond on the State's behalf to an

incident when requested by the State On-Scene Coordinator. These agreements address Hazmat responses beyond the normal jurisdictional boundaries of the MOA and the City of Kodiak.

Information on the Statewide Hazardous Materials Response Team and current hazmat detection equipment and other assets can be found at this link: <a href="http://dec.alaska.gov/spar/ppr/hazmat.htm">http://dec.alaska.gov/spar/ppr/hazmat.htm</a>

Additionally, information on local/community fire departments can be found in the **Community Profiles**.

**Collapsible Rigid-Frame Tent Systems (Main System and Deployable System)**: These collapsible, rigid frame tent systems are erected at the field decontamination (decon) site, supported with heater systems and soap and water. This three-tent system is the decon system for major population areas.

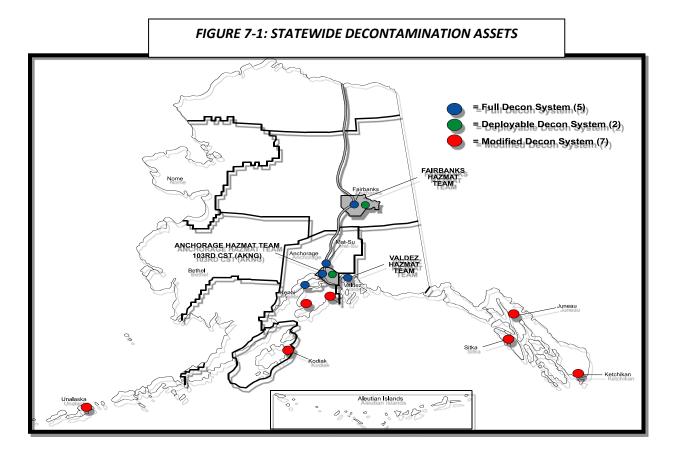
The main system is pre-positioned in communities with high population densities or risks, and where an operational Level A team exists to provide support with use of the system. The system would consist of the three-tent configuration with a trailer for storage and transport. The communities equipped with main decon systems include Anchorage (2), Kenai (1), and Mat-Su Valley (1). Anchorage maintains a second system in deployable configuration for responses elsewhere in the state.

The systems may be collocated with local hospitals to assist with contaminated individuals either self-transported or transported to the hospital via ambulances for decontamination (for both expedient as well as complete decontamination.) Further coordination is ongoing with local hospitals and State medical staff to further develop and enhance the overall mass decontamination capabilities in the state.

**Modified Decontamination System:** A modified tent system was also purchased for smaller at-risk communities with an expressed interest in maintaining a decon system. The modified system consists of a single tent system with support equipment and a trailer for storage and transport. Communities equipped with the modified decon systems include Homer, Juneau, Ketchikan, Kodiak, Seward, Sitka, and Unalaska. Several other communities have requested decon systems as part of their federal Office of Domestic Preparedness grant request. The modified decon system specs and trailer specs were provided to these communities to maintain consistency throughout the state.

The Statewide Hazmat Response Workgroup continues to coordinate with the medical community on issues related to expedient field and hospital decontamination issues. The Hazmat Teams will generally perform expedient decontamination of persons at the scene of an incident. Once decontaminated in the field, individuals are then transported to the hospital or another location for further decontamination. In the event of a major incident involving numerous casualties and contaminated personnel, there is a definite potential for ambulatory and otherwise self-transported patients to arrive at the hospital for decontamination and treatment.

The below figure provides a quick summary of the locations of main and modified decontamination assets in the state.



7410.3 – Local Emergency Planning Committees

Information on the Local Emergency Planning committees can be found at this link: <a href="https://www.ready.alaska.gov/SERC/LEPC">https://www.ready.alaska.gov/SERC/LEPC</a> Home

## 7410.4 – Radiological Detection/Monitoring

Within the State of Alaska, basic radiation monitoring capabilities are described below. In the event of a radiological incident threatening the State of Alaska, other resources in the lower 48 could be deployed to enhance the area and point detection capabilities.

**Statewide Hazmat Team Radiological Detection Assets:** For a listing of detection equipment maintained by ADEC, EPA, USCG and the Statewide Hazmat Teams, Reference below.

**Department of Defense:** The Department of Defense (DOD) also maintains a variety of radiation detection equipment at four primary locations in the state: Elmendorf AFB and Ft Richardson in Anchorage; Eielson AFB and Ft Wainwright in Fairbanks. These instruments are primarily handheld point detectors for high and low range radiation intensities. Personal dosimeters and film badges are also available in limited quantities. DOD does not maintain airborne monitoring capabilities in Alaska. For a listing of DOD radiological equipment assets located within Alaska, Reference below.

**United States USCG:** Radiological equipment for USCG D17 units includes two different types of gear: the Personal Radiation Detector (PRD) or PM1703GN, and the Radioactive Isotope Identifier (RIID) or identiFINDER-U.

## Other Federal Agency Assets (EPA, FEMA, DOE, NRC):

- a. **Department of Energy** The Department of Energy (DOE) maintains national and regional coordination offices as points of access to Federal radiological emergency assistance. The Regional Coordination Office for DOE Region 8 is the Richland Operations Office.
- b. Radiological Assistance Program, Region 8, Richland Operations Office, Richland, Washington The Region 8 Radiological Assistance Program (RAP) is responsible for providing assistance in monitoring and assessment activities associated with radiological incidents or emergencies and coordinating U.S. Department of Energy resources as needed in the States of Washington, Oregon and Alaska. The RAP team is made up of teams composed of qualified DOE, Richland Operations Office (RL), and RL contractor personnel who are experts in monitoring radioactive materials involved in the incident. The RAP Team Leader (an RL official or designee) is responsible and has the authority to activate the resources and support necessary when assistance is requested. The radiological assistance teams are deployed in support of the State authorities and/or lead federal agency and are not intended to direct actions at the scene or assume command and control, except when DOE is the lead federal agency.

The RL can request the assistance of the other emergency response assets should the existing capabilities of the RAP team be inadequate to accomplish the task. Requests can be made through the Region 8 RAP or through DOE-Headquarters Emergency Operations Center through a 24-hour telephone number. Determination to activate or deploy the emergency response assets will be made by the National Nuclear Security Administration Office of Emergency Response, located in Washington, D.C.

Specialized expertise and equipment capabilities are located throughout the DOE and DOE contractor system. The DOE radiological assistance teams are knowledgeable of the DOE resources and may request their use, including other federal assets listed below.

c. Federal Radiological Monitoring and Assessment Center, DOE, Nevada Operations Office – The Federal Radiological Monitoring and Assessment Center (FRMAC) is an operational center located at or near the scene of a radiological incident and provides a focal point to compile and coordinate all off-site federal radiological monitoring and assessment activities. The FRMAC is established when a major radiological emergency exists. A major radiological emergency is determined when a request for assistance requires capabilities exceeding those of the DOE regional RAP team. A request for additional assistance is recommended to the senior official or lead federal agency official.

The FRMAC is self-supporting, including specialized resources in radiation protection, legal and medical support, communications, logistics, videos, and administration. A FRMAC could be deployed as a unit or separately, as conditions dictate. Specific capabilities could be requested, e.g., Aerial Measuring System and the National Atmospheric Release Advisory Capability.

d. Aerial Measuring System, DOE, Nevada Operations Office – The Nevada Operations Office contractor, Bechtel Nevada, can provide aerial measurements of ground surfaces through gamma spectroscopy. They also have a capability to make in-plume air concentration measurements in the event of a reactor accident release, large area continuous release, or contamination incident. Aerial photography can be performed simultaneously with isodose and isoconcentration curves. The aerial measurement survey is primarily used for making rapid radiological assessment of substantial land areas and the analysis and identification of the radioactive emissions from a source.

- e. National Atmospheric Release Advisory Capability, DOE, Oakland Operations Office Another major DOE resource maintained at Lawrence Livermore National Laboratory is the National Atmospheric Release Advisory Capability (NARAC). The NARAC is a centralized computer-base system that estimates the transport, diffusion, and deposition of radioactive materials released to the atmosphere and dose projections to people and the environment.
- f. Radiation Emergency Assistance Center/Training Site, DOE, Oakridge Operations Office Radiation Emergency Assistance Center/Training Site (REAC/TS), operated by the Medical Sciences Division of the Oak Ridge Institute for Science and Education for the U.S. Department of Energy, provides 24-hour assistance with medical and health physics problems associated with radiation accidents in local, national, and international arenas. REAC/TS is prepared to deploy to a radiological emergency with the FRMAC to provide:
  - Medical and radiological triage
  - Decontamination procedures and therapies for external contamination and internally deposited radionuclides, including chelating therapy
  - Diagnostic and prognostic assessments of radiation induced injuries, and
  - Radiation dose estimates by methods that include cytogenetic analysis, bioassay, and in-vivo counting.

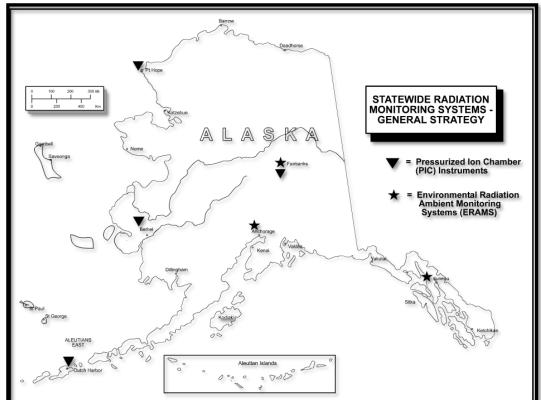


FIGURE 7-2: STATEWIDE RADIATION MONITORING SYSTEMS - GENERAL DEPLOYMENT STRATEGY

# 7420 - Policy, Guidance, and Studies

For the most recent summary of EHS releases by Calendar Year, visit the ADEC website at: <a href="http://dec.alaska.gov/spar/ppr/hazmat.htm">http://dec.alaska.gov/spar/ppr/hazmat.htm</a>

# STATEWIDE HAZMAT RESPONSE TEAM RADIOLOGICAL DETECTION ASSETS

Manufacturer/ Model No.	Detection Capabilities	Quantity	Location	Owning Agency
Eberline E-120		2	Anchorage, Kenai	ADEC
Victoreen 190		14	Anchorage, Fairbanks, Juneau, Kenai, Ketchikan	ADEC
Victoreen CDV 700-6A		1	Anchorage	ADEC
Bicron Surveyor 50		2	Anchorage	ADEC
Ludlum 2241-2,Dual Survey Meter	Depends on probe	1	Anchorage	EPA
Ludlum 44-9 (Pancake probe)	Alpha, Beta, Gamma	1	Anchorage	EPA
Ludlum 3 Survey Meter	Alpha, Beta, Gamma	1	Anchorage	EPA
Ludlum 192 Survey Meter	Low level gamma	1	Anchorage	EPA
Ludlum 44-2, Scintillator Probe	Gamma	1	Anchorage	EPA
Ludlum 43-90, Alpha Scintillator Probe	Alpha	1	Anchorage	EPA
Eberline Monitor 4, Radiation Alert Monitor	Alpha, Beta, Gamma	1	Anchorage	EPA
Canberra Mini-Radiac, Personal RadMon Device	Gamma	1	Anchorage	EPA
Ranger	Radiation Detector	1	Anchorage	Anchorage FD
Ludlum Model 9	Beta, Gamma	2	Anchorage	Anchorage FD
Ludlum 2241 / Pancake	Alpha, Beta, Gamma	2	Anchorage	Anchorage FD
MiniRadiacs	Alpha, Beta, Gamma	28	Anchorage	Anchorage FD
Ludlum 2241-3, Dual Survey Meter	Alpha, Beta, Gamma	1	Fairbanks	Fairbanks Hazmat
GammaRAE II	Gamma	5	Fairbanks	Fairbanks Hazmat
Bicron Surveyor 2000 radiation monitor w/ probe	Alpha, Beta, Gamma	1	Fairbanks	Fairbanks Hazmat
ADM-300		1	Anchorage	103CST (AKNG)
AN-VDR 2		2	Anchorage	103CST (AKNG)
PDR-77		2	Anchorage	103CST (AKNG)
Staplex Air Sampler		5	Anchorage	103CST (AKNG)
Thermoelectron FH-40		2	Anchorage	103CST (AKNG)
UDR-13		22	Anchorage	103CST (AKNG)

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Manufacturer/ Model No.	Detection Capabilities	Quantity	Location	Owning Agency
GSM-110 Rad-Detector		2	Valdez	Valdez Hazmat
Inovision Rad-Detector		1	Valdez	Valdez Hazmat
Radiation Pager		3	Valdez	Valdez Hazmat
Pen Dosimeter		10	Valdez	Valdez Hazmat
Canberra Radiagem 4000		1	Juneau	Juneau Hazmat
Alpha, Beta, Gamma Probe (SABG-15)		1	Juneau	Juneau Hazmat
Gamma Probe (SG-2R)		1	Juneau	Juneau Hazmat
Dosicard Stand-Alone		1	Juneau	Juneau Hazmat
Personal Radiation Detectors (PRD)		19	Anchorage	USCG
Identifinder-U		1	Anchorage	USCG
RADPACK		1	Anchorage	USCG
Personal Radiation Detectors (PRD)		4	Cordova	USCG
Identifinder-U		1	Cordova	USCG
Personal Radiation Detectors (PRD)		8	Homer	USCG
Identifinder-U		1	Homer	USCG
Personal Radiation Detectors (PRD)		34	Juneau	USCG
Identifinder-U		1	Juneau	USCG
RADPACK		1	Juneau	USCG
Personal Radiation Detectors (PRD)		10	Ketchikan	USCG
Identifinder-U		1	Ketchikan	USCG
Personal Radiation Detectors (PRD)		4	Kodiak	USCG
Identifinder-U		1	Kodiak	USCG
Personal Radiation Detectors (PRD)		4	Petersburg	USCG
Identifinder-U		1	Petersburg	USCG
Personal Radiation Detectors (PRD)		4	Seward	USCG
Identifinder-U		1	Seward	USCG
Personal Radiation Detectors (PRD)		4	Sitka	USCG
Identifinder-U		1	Sitka	USCG

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## USARAK ALCOM RADIOLOGICAL ASSETS

USARAK ALCOW RADIOLOGICAL ASSETS											
USARAK (US Army)	M17 (MASK)	M24/25 (MASK)	M291 (PERS DECON KIT)	M13 (DECON EQUIP)	M8A1 (CHEMDET)	M256 (CHEMDET)	IM 93 (DOSIMETER)	IM 174 (RADIACMETER)	VDR 2 (RADIACMETER)	PDR 75 (RADIACMETER)	PDR (RADIACMETER)
FRA (Ft Richardson)											
501st IN BN	660	0	810	64	23	69	77	12	27	6	1
21st SIG CO	202	NA	205	90	18	20	20		17	1	
23rd ENG CO	145	NA	200	NA	4	6	NA		4	4	
20th PAD	5	NA	0	NA	0	0	NA	4	NA	NA	
98th MAINT		239	NA	0	0	4	26	14		0	1
FWA (Ft Wainwright)											
HHC 1st BDE	396	NA	206	105	25	35	46		18	5	
1-17 IN BN	613	10	569	95	25	57	85		25	5	
4-9 IN BN	641	9	525	82	25	56	84		25	5	
4-11 FA BN	506	NA	504	126	17	65	23		5	5	
706 SPT BN	760	0	651	242	21	87	85		39	8	
A TP/4-9CAV	117	NA	220	21	14	25	33		17	1	
567 ENG CO	171	NA	375	12	5	12	20		5	1	
6 MI CO	163	NA	224	86	12	31	39	9	0	3	
47 ENG CO	142	NA	0	5	4	26	8		4	1	
BAND	42	NA	44	2	2	4	4		1	1	

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# **USAFAK ALCOM RADIOLOGICAL ASSETS**

OSALAK ALCOM KADIOLOGICAL ASSETS											
USAFAK (US Air Force)	PDR 27T (RADIAC METER)	PDR 27G (RADIAC METER)	PDR 27A (RADIAC METER)	PDR 43E (RADIAC METER)	PDR 43D (RADIAC METER)	PDR 56F (RADIACMETER)	ADM 300	IM 93 (DOSIMETER)	IM 143 (DOSIMETER)	TLV	CDV 750 (DOSIMETER CHARGER)
EAFB (Elmendorf AFB)											
3 CES/CEXD	6		1	11	1	6	3	12	83		5
3 AMS/SGPB	3	1				1	4			15	
EIL (Eielson AFB)	_										
343 CEX/SPTG	6			8		1		20			3
HOSPITAL	1			3		1	2				

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#### 8000 – SALVAGE & MARINE FIRE FIGHTING

This section is an On Scene Coordinator's (OSC) guide to marine firefighting, salvage, and lightering operations. This document is designed to work in concert with the Incident Command System Operational Period Planning Cycle and should be used as a reference before or *during* an incident in order to assist with initial actions when preparing an Incident Action Plan for marine firefighting, salvage and/or lightering operations. This document is *not* intended to be an all-inclusive technical guide to vessel marine firefighting, salvage or lightering. For technical guidance, OSCs should Reference resources and references covered in below.

## **8100 – MARINE FIRE FIGHTING**

Normally fighting a shipboard fire is the responsibility of the ship's crew and owner. Tank vessels and non-tank vessels greater than 400 GT operating in U.S. navigable waters are required to have vessel response plans that detail marine firefighting and salvage operations. Local government resources may be used to fight the fire. State or federal government resources are not normally used to fight shipboard fires unless there is a threat to human life or safety or the fire threat creates a release of oil or hazardous substance. Funds available through the Oil Pollution Act may be used to fight a shipboard fire to alleviate the threat of pollution.

## **8200 - EMERGENCY TOWING**

Alaska's local communities, pristine environment, and socio-economic status could suffer significant negative effects if marine spills are not prevented or responded to and contained immediately.

Within the last decade, several distressed or stricken vessel incidents occurred in Alaska, a few resulting in spills that negatively affected coastline communities with severe environmental and economic consequences. Examples include the groundings of the Motor Vessel (M/V) KUROSHIMA in 1997 and the M/V SELENDANG AYU in 2004. Other near-miss incidents have occurred in which a large vessel lost propulsion or steerage capacity and went adrift for some time before regaining control. Many foreign vessels transiting US waters do not carry appropriate or reliable towing systems.

To assist disabled or otherwise stricken vessels, emergency towing systems have been designed to provide the capability for an emergency rescue. By pre-positioning these specially designed Emergency Towing System (ETS) packages in areas of high vessel traffic or risk, potential oil spills can be averted. By reducing the risk of spills, coastal areas can be protected, avoiding potential damage to fish, wildlife and other natural resources.

The ETS may be airlifted to the distressed ship via helicopter or deployed to a disabled ship by tugboat or a vessel-of-opportunity. The system consists of a high strength floating towline (currently considered as best available technology) capable of towing a large vessel, a messenger line to assist in deploying the towline, a line-launcher, a towing shackle, a strobe light buoy, and chafing gear.

The ETS might also be used in the event of vessel grounding. Upon USCG approval, the ETS could be passed to a grounded vessel in support of salvage and towing operations.

There are two sizes for ETS available within Alaska. The larger size is capable of towing vessels greater than 50,000 DWT while the smaller system is designed vessels less than 50,000 DWT. As of 2017, there are seven large and three medium size ETS strategically distributed across the state.

Please review ADEC's website <a href="http://dec.alaska.gov/spar/ppr/prevention-preparedness/ets/">http://dec.alaska.gov/spar/ppr/prevention-preparedness/ets/</a> for updated locations and additional information.

## 8300 - MARINE SALVAGE AND LIGHTERING

## 8310 – Notification of Marine Casualties

Marine Casualty notification regulations are found in <u>46 Part 4</u>, <u>33 Part 160.215</u>, and <u>33 Part 155.4010</u> of the Code of Federal Regulations.

## 8320 - Responsibilities of the Responsible Party and FOSC

In the case of an incident, the Responsible Party (RP) must take adequate measures to mitigate and/or remove damage, or risk of damage, caused by the vessel or the release of any materials from the vessel. The RP will pay for all legitimate response measures, up to their limit of liability. If an RP cannot be identified, or the acting RP fails to adequately respond, it is the responsibility of the Captain of the Port or FOSC to take over control of a particular aspect of, or the entire response. In this case, funding will be provided by the federal government until an RP is identified and charged for the response.

# 8330 - Initial Response and Casualty Assessment

Common to all casualties is a need for the quick and substantial allotment of response resources. The Unified Command will set the objectives of a vessel casualty response. Early dissemination of an accurate assessment of the vessel's condition and deployment of appropriate response resources is essential.

## 8330.1 – Initial Actions to Be Taken By the Crew

A prudent vessel captain will take certain actions to mitigate the threat to the crew and vessel. Upon receiving notification of a marine casualty, the Incident Commander should verify that the vessel master, if possible and appropriate, has taken the following actions:

Have ship's personnel report to emergency stations
Secure watertight fittings
Take appropriate firefighting actions
Notify the ship's operations controller
Obtain an accurate cargo storage plan

- ☐ Request shore personnel request salvage assistance
- □ Display day shapes & sound appropriate signals

## 8330.2 – Critical Information

There is certain information that is critical to planning a successful salvage operation. This information, essential to the response planning process, should be gathered from the vessel master or on-scene response personnel, as appropriate to the situation. The information gathered should be used to determine the "window of opportunity" - i.e., when the most factors align for a successful operation.

Following the report of an incident, certain initial information must be gained to mount a successful response and salvage operation. This list is not all-inclusive, but may be used to ensure certain critical information is gathered from on-scene personnel as well as from response resources. Many of the ship design particulars may be retrieved from the vessel's Shipboard Oil Pollution Emergency Plan (SOPEP) and Vessel Response Plan (VRP).

Incident	Critical Information
All Incidents	
Safety status of crew	
Proximity to navigation hazard	
On-scene weather conditions	
Forecasted weather conditions	
Contracted resources	
Potential damage / breaches in hull	
Potential for spill or plume	
Status of ground tackle	
Communications nature and schedule	
Quantity/nature of cargo/fuel/ballast	
Status of propulsion & steering	
Grounding	
Pre-casualty drafts	
Post-casualty drafts	
Tide height at grounding	
Location/depth of soundings	
Time/Height of next high tide	
Liquid level of all tankage	
Availability of salvage resources	
Bottom type	
Fire	
Status of shipboard fire pumps	
Status of fixed firefighting systems	
Risk of further damage to vessel	
Status of emergency electrical systems	
Availability of firefighting resources	
Collision/Allision/Flooding	
Relative stability of each vessel	
Status of ships dewatering systems	
DOT, ACOE, State notified (allisions)	

# 8330.3 – Identify Response and Salvage Assets

The RP should immediately contract and set into motion adequate response and salvage resources. Historically, there has been reluctance on behalf of the vessel's representatives to engage a professional salvor. A decision to attempt operations without a professional salvor should be examined critically by the FOSC. To assist the RP in contracting a professional salvor, the FOSC may share information of proven response and salvage resources as listed below. In addition to ensuring that the RP has contracted adequate response resources, the FOSC should identify and deploy appropriate USCG resources to respond to the incident. These response teams should include unit Pollution Investigators, Casualty Investigators, and Vessel Inspectors. Furthermore, the SERT team at the Marine Safety Center should be engaged and, potentially, the Navy SUPSALV. Contact numbers for these assets may be found in Section 8370 below.

Areas should keep a current listing and contact information for professional salvor resources located within their zone. This list may be referred to or provided to an RP when ensuring a time allocation of tug and salvage assistance. These are all commercial resources that require funding. When populating this list with salvors, consider company's 24-hour capabilities, employee training, response history, and ability to create an acceptable salvage plan.

If zone involves international border, consider including international assets in this list.

Resource	24-hour phone number	Internet address
Towing / Salvage		
Oil Spill Response		
HazMat Response		
Fire Response		

# 8330.4 – Stranded Vessel Quick Response Card (QRC)

Establishing a quick and effective towing arrangement on a stranded vessel or one that has simply lost its ability to maneuver may mean the difference between a simple maneuvering evolution and disaster. The following QRC is provided to ensure that RP is taking appropriate and adequate actions to mitigate risk to the vessel and further impact of the casualty.

# Vessels Adrift – Risk identification

Vessel position		
	°Latitude, °Longitı	ude
Current vessel set and drift		
	degrees True	knots
Predicted set and drift due to weather/tide/current*		
	degrees True	knots
Nearest shoal, hazard, or shipping lane		
	identification	
Distance to nearest shoal, hazard or shipping lane		
	nautical mile (nm)	
Time to reach nearest shoal, hazard or shipping lane		
(nm/knots of drift) / Estimated time	** hours	hh:mm

<sup>\*</sup>Vessels adrift may slow their set and drift with the use of a drogue or by lowering their ground tackle, even if it does not reach the sea floor. Slowing set and drift increases critical available response time.

# Towing Vessels – Time to rig tow

	<u> </u>	•	1
	Time to recall vessel crew / Estimated time		
		hours	hh:mm
	Time to get towing vessel underway enroute to stranded		
	vessel position / Estimated time	hours	hh:mm
	Distance from towing vessel to stranded vessel		
		nm	
	Cruising speed of towing vessel		
		knots	
	Time till towing vessel on scene (nm/knots) / Estimated time		
		hours	hh:mm
	Time to rig tow / Estimated time		
		hours	hh:mm
	Time to re-setup for tow if first attempt fails		
		hours	
	Total time to take control of vessel (hours till on scene + hours		
	to rig tow)/ Estimated time	** hours	hh:mm
** -			

<sup>\*\*</sup> Time to take control of vessel must not exceed the time to reach the nearest shoal or hazard.

Towing assets should be called upon in the following priority while ensuring adequate response time: (1) Commercial towing vessels (2) USCG assets (3) DOD assets (4) U.S. vessels in the vicinity (5) Foreign vessels in the vicinity

## 8340 – Setting the First Operational Objectives

Once enough information has been gathered to proceed with a decisive action plan, the USCG Operational Commander, IC or UC will set forth the operational period objectives. These objectives may include but are not limited to:

- 1. Evacuate crew
- 2. Control vessel movement
- 3. Get response personnel and equipment on-scene
- 4. Extinguish shipboard fire
- 5. Stop/slow flooding
- 6. Stop/slow vessel movement toward potential hazards
- 7. Contain pollution
- 8. Identify suitable port of refuge
- 9. Create a salvage plan
- 10. Mitigate potential impacts of the casualty on other vessel traffic and port activities
- 11. Evaluate risk to public- i.e., hazardous material release, air quality, etc.
- 12. Prepare and approve press release
- 13. Establish a safety zone
- 14. Contact all appropriate Federal, State and local agencies, as well as foreign governments
- 15. Evaluate/mitigate the environmental impacts of incident
- 16. Identify an appropriate lightering vessel

## 8350 - Oil/Hazardous Material Release Mitigation and Lightering

Oil spills or hazardous material releases are of the greatest potential during groundings and almost a certainty during a major collision or other event when there is a breach in the hull. There are several ways to establish if there is an oil spill or hazardous material release. The primary method may be observation of a sheen emanating from the damaged vessel. However, this method may be of limited usefulness at night and is not indicative of damages inboard of the hull structure. Bunker and cargo tanks should be immediately sounded and monitored closely for changes that would indicate a breach. Given the high correlation between major marine casualties and pollution incidents, it is prudent to provide, at a minimum, a containment boom to surround the vessel(s).

One of the most effective ways to mitigate or prevent an oil spill or hazardous material release is to remove all remaining cargo and unnecessary bunker fuel from the vessel. This is particularly useful when the risk of a hull breach is increasing due to changing environmental or physical conditions on the vessel. Vessels may be lightered to another vessel, or lightered to mobile facilities ashore. Choosing which is most appropriate will depend on the location of the vessel and availability of each. Whichever is chosen, it is important to ensure the receiving vessel or facility is qualified to handle the lightered material and that any cargo/residue in hoses and holding tanks are compatible with lightered material. Furthermore, the effects on the stability of the vessel should be taken into account when lightering a vessel. While lightering may present benefits when attempting to re-float a vessel, it may also present additional structural stresses upon the vessel. It is important to work with naval architects as well as the person in charge of loading/offloading the vessel, who is frequently the Chief Officer or First Mate of the vessel.

# 8360 - Vessel/Cargo Salvage Plan Review

A plan is essential to any successful salvage operation. Depending on the urgency and complexity of the operation, the quality of the plan may vary from a bound document approved by engineers to a sketch on a cocktail napkin. All involved parties must ensure that the plan provided is appropriate given the

constraints of the operation. Given optimal conditions as well as time and resources available, a complete salvage plan will include the elements listed below.

When evaluating a salvage plan, it is essential to rely upon the resources available to an IC or UC for these particular incidents. The two major public resources are the USCG's SERT and the Navy's SUPSALV. Information on these resources and their contact information are provided in Section 8370.

# Elements of a Salvage Plan

All Incidents
Pre-incident drafts fore and aft
Cargo listing / volume
Fuel volume
Status of vessel propulsion and steering systems
Post casualty drafts
Contingency planning identifying possible failure points
Lightering considerations
Clear understanding or contractual agreement of responsibility for control of vessel
Strength of hull girder, damaged areas, attachment points, and rigging
Booming considerations
Means for controlling interference between pollution response and salvage efforts
Potential pollution risks and precautions to avoid or minimize impact
Communications plan
Anticipated start time and predicted tides, currents, weather
Grounding
Post casualty drafts/locations/soundings
Bottom type
Estimated ground reaction
Force-to-free
Towing assets available/utilized and horse power of each
Predicted stability when re-floated
A summary of the engineering rationale for retraction & refloating techniques
Tow/rigging plan including attachment points
Lightering
Volume of cargo/fuel to be lightered
Type of cargo to be lightered
Identification of compatible receiving facilities
Special procedures to handle hazardous cargo/materials
Flooding
Identification and listing of all dewatering systems to be employed
Order of dewatering to ensure satisfactory stability of vessel
Transit Plan
Identification of transit route and final destination
Means for controlling the vessel as it is freed
Route identified, with special attention to increased draft and beaching areas
Vessel escorts, if any, to be employed and horse power of each
Any preparation of vessel necessary to gain permission for entry into destination

## 8370 - Resources

## 8370.1 - General

In addition to mobilizing unit investigators, inspectors, and responders, the first calls of a response should include contact with these resources. The missions of these resources are explicitly to assist Incident Commanders and on-scene response personnel in addressing matters of vessel salvage. In the table provided below, a number one indicates the best-suited resource, while a two indicates a capable, though secondary resource. It is important to note that employing either a commercial salvor or Navy SUPSALV will require a funding source.

	Commercial Salvor	SERT Team*	Strike Team*	Navy SUPSALV
Vessel Assessment	1	2		2
Pollution Assessment	2		1	
Salvor Equipment	1		2	1
Salvage Plan Assessment		1		2

<sup>\*</sup> USCG teams will provide services to a USCG unit at no cost.

## 8370.1.1 - Marine Safety Center Salvage Emergency Response Team

Contact numbers: (202) 327-3985 (24 hours) or via the USCG Command Center at (800) 323-7233 (24 hours).

The Marine Safety Center Salvage Emergency Response Team (SERT) is on call to provide immediate salvage engineering support to the USCG Captains of the Port (COTP) and Federal On-Scene Coordinators (FOSC) in response to a variety of vessel casualties. Specifically, SERT can assist the COTP and FOSC manage and minimize the risk to people, the environment, and property when responding to vessels that have experienced a casualty. SERT provides this assistance by performing numerous technical evaluations including: assessment and analysis of intact and damaged stability, hull stress and strength, grounding and freeing forces, prediction of oil/hazardous substance outflow, and expertise on passenger vessel construction, fire protection, and safety.

SERT has mobile computing capability for on-scene deployment. The MSC maintains a database containing over 5,000 hull files that can be used to generate computer models of vessels used in salvage engineering. External relationships with organizations like the Navy Supervisor of Salvage (SUPSALV), USCG Intel Coordination Center, and the Office of Naval Intelligence (ONI), as well as all major class societies, enable the salvage team to quickly locate and transfer information about a damaged vessel that would otherwise be difficult to access.

When requesting SERT assistance, the Rapid Salvage Survey Form, which contains the minimum essential casualty details, should be used.

# 8370.1.2 - USCG Strike Teams

National Strike Force Coordination Center: (252)-267-3458 (24 Hours)

The National Strike Force (NSF) was established in 1973 as a direct result of the Federal Water Pollution Control Act of 1972. The NSF's mission is to provide highly trained, experienced personnel and specialized equipment to USCG and other federal agencies to facilitate preparedness and response to oil and hazardous substance pollution incidents in order to protect public health and the environment. The NSF's area of responsibility covers all USCG Districts and Federal Response Regions.

The strike teams provide rapid response support in incident management, site safety, contractor performance monitoring, resource documentation, response strategies, hazard assessment, oil spill dispersant and operational effectiveness monitoring, and high capacity lightering and offshore skimming capabilities

# 8370.1.3 - NAVSEA Supervisor of Salvage and Diving

**(202) 781-3889 (24 HOURS)** - The Office of the Director of Ocean Engineering, Supervisor of Salvage and Diving (SUPSALV), is a component of the Naval Sea Systems Command (NAVSEA). SUPSALV is located at the Washington Navy Yard in Washington, DC. SUPSALV is responsible for all aspects of ocean engineering, including salvage, in-water ship repair, contracting, towing, diving safety, and equipment maintenance and procurement.

The Salvage Operations Division maintains standing worldwide commercial contracts for salvage, emergency towing, deep ocean search and recovery operations, and oil pollution abatement. Additionally, they own, maintain and operate the worldwide Emergency Ship Salvage Material (ESSM) system, which incorporates the world's largest standby inventory of salvage and pollution abatement equipment. They also own, maintain, and operate a large number of deep ocean search and recovery systems, with depth capabilities up to 20,000 feet. They also routinely provide salvage technical assistance to fleet salvors, as well as to other federal agencies.

Within the National Oil and Hazardous Substance Pollution Contingency Plan, SUPSALV has been assigned as one of seven "Special Teams" available to the Federal On-Scene Coordinator (FOSC). Thus, they provide assistance (personnel and/or equipment) for commercial oil or hazardous substance spills, or potential spills (i.e., salvage operations), as requested by any FOSC. Assistance ranges from salvage technical or operational assistance to mobilization of SUPSALV and other Navy resources to support a partial or full federal response to a marine casualty. Be aware, however, these services are provided on a reimbursable basis only – they are not free.

# 8370.1.4 - American Salvage Association

**(703) 373-2267** - Leading U.S. salvors have formed the American Salvage Association (ASA). Created in response to the need for providing an identity and assisting in the professionalizing of the U.S. marine salvage and firefighting response, the intention of the ASA is to professionalize and improve marine casualty response in U.S. coastal and inland waters. The American Salvage Association meets with various federal and state agencies to exchange views on the improvement of salvage and firefighting response in the U.S.

## 9100 - EMERGENCY NOTIFICATION

# Initial Emergency Response Communications -EMERGENCY RESPONSE **NOTIFICATION LIST**

In the case of a reportable oil or hazardous substance spill (as defined in state and federal regulations), the Responsible Party or initial responder to the spill incident will immediately notify the following agencies. Once these initial notifications have been made, the Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and Local On-Scene Coordinator (LOSC) respectively, will be responsible for the notification of appropriate federal, state, and local agencies and organizations according to the contact lists contained on the following pages.

The area code for all phone and fax numbers is 907, unless otherwise indicated.

271 5006

## **FEDERAL:**

National Response Center (24 Hr)	1-800-424-8802
FOSC for Coastal Zone	
USCG – Marine Safety Unit Valdez (24-Hr)	831-0236
Fax	835-7207
FOSC for Inland Zone (1,000 yards from shoreline)	
EPA Region X Alaska Operations, Anchorage Office	271-5083
FOSC Matt Carr cellular contact	227-9936
FOSC Bob Whittier cellular contact	830-7236
Fax	271-3424
Seattle Office 24-hr Hotline	(206) 553-1263
FOSC Historic Properties Specialists	

See the listing of BOA contractors in the Resources Section (see Tab C) for contact information of individuals who may serves as the Historic Properties Specialist for FOSCs.

Federal/State Natural Resource Trustee Emergency Contacts: Information for Federal and State natural resource trustee emergency contacts is included in Tab T of the Resources Section.

Threatened and Endangered Species Consultation Contacts

Dusiness Hours Ancherose

Department of the Interior

Business Hours	271-5011
24-Hr Contact	227-3783/3781
Fax	271-4102
rtment of Commerce/NOAA Fisheries' National Marine Fisheries Service (NM	1FS)

Depart

Business Hours – Anchorage271-3000	)
NMFS 24-Hr Hotline 1-877-925-7773	3

# **STATE:**

# **SOSC for Coastal or Inland Spills**

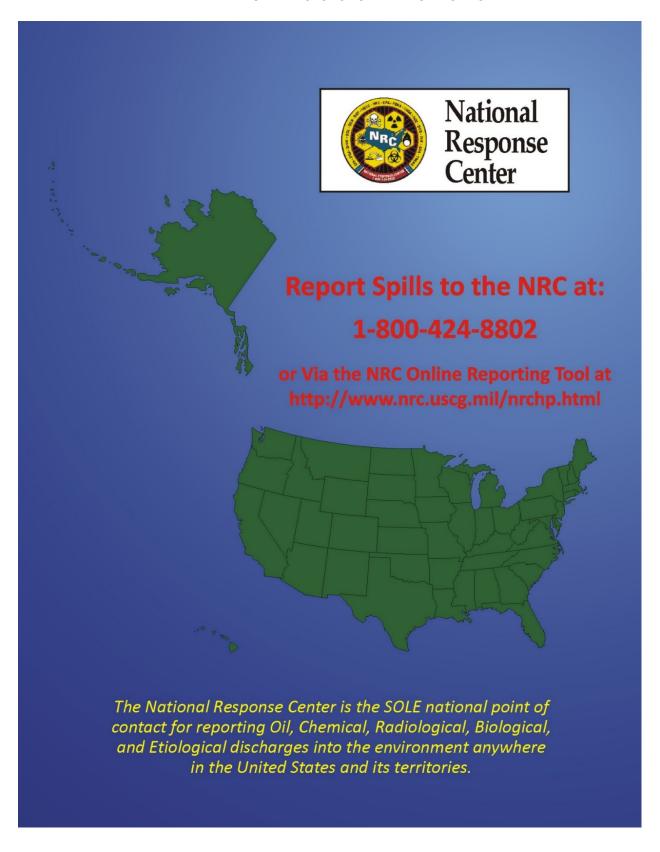
ADEC Central Alaska Response Team

Business Hours	269-3063
Fax	269-7648
After Hours Spill Reporting Hotline	1-800-478-9300

# 9110 - Initial Awareness, Assessment & Notification Sequence

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## FEDERAL NATIONAL RESPONSE CENTER NOTIFICATION



# IT'S THE LAW!

AS 46.03.755 and 18 AAC 75.300

# REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

# **During Normal Business Hours**

call the nearest response team office:

Central Alaska: Anchorage

Northern Alaska: Fairbanks

Southeast Alaska: Juneau (907) 269-3063 Fax: (907) 269-7648

(907) 451-2121 Fax: (907) 451-2362

(**907**) **465-5340** Fax: (907) 465-2237

# **Hazardous Substance**

Any hazardous substance spill, other than oil, must be reported immediately.

# Oil - Petroleum Products

# To Water

 Any amount spilled to water must be reported immediately.

## To Land

- Spills in excess of 55 gallons must be reported immediately.
- Spills in excess of 10 gallons, but 55 gallons or less, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of 1 to 10 gallons must be recorded in a spill reporting log submitted to ADEC each month.

# To Impermeable Secondary Containment Areas

 Any spills in excess of 55 gallons must be reported within 48 hours.

# Additional Requirements for Regulated Underground Storage Tank Facilities

Regulated Underground Storage Tank (UST) facilities are defined at 18 AAC 78.005 and do not include heating oil tanks.

If your release detection system indicates a possible discharge, or if you notice unusual operating conditions that might indicate a release, you must notify the ADEC UST Program within 7 days.

UST Program: (907) 269-3055 or 269-7679

# **Outside Normal Business Hours**

**Toll Free** 

1-800-478-9300

International

1-907-428-7200



Alaska Department of
Environmental Conservation
Division of Spill Prevention and Response
www.dec.alaska.gov/spar/spillreport.htm

rev. Feb/2013

## 9200 - PERSONNEL AND SERVICES DIRECTORY

# 9210 - Federal Resources/Agencies

It is the responsibility of the FOSC to initiate contact with the following agencies and organizations once emergency notifications have been made. This is not an exhaustive list of federal contacts, and the FOSC may notify additional parties as well as those listed below. Phone numbers are not listed in order of importance and contacts will be made at the discretion of the FOSC. Initial notifications will be made by telephone, with concurrent transmission of any available documents (e.g. POLREP or other information) by fax or e-mail whenever possible. Additional federal agency contacts are listed in the Resources Section of this plan.

AGENCY	PHONE	FAX	ALT. PHONE		
COAST GUARD CONTACTS					
National Response Center	1-800-424-8802	(202) 267-	(202) 267-		
		2165	2675		
District 17 Command Center (SAR)	478-5555	463-2023			
District 17 Public Affairs	463-2065	463-2072			
Marine Safety Unit Valdez (24-Hr)	406-0001	835-7207	406-0002		
Marine Safety Unit Valdez Station	835-5350				
Marine Safety Unit Valdez Vessel Traffic Service	835-7205	835-7207			
Sector Anchorage	428-4200	428-4114			
Sector Anchorage Command Center (SAR)	428-4100				
USCG Cutter Chandeleur	835-5300				
USCG Cutter Sycamore (Cordova)	424-3434				
Air Station Kodiak	487-5156				
Communication Station Kodiak	487-5778				
USCG Pacific Strike Team	(415) 883-3311	(415) 883-			
		7814			
National Strike Force	(252) 331-6000	(252) 331-			
		6012			
National Pollution Funds Center	(202) 493-6700	(202) 493-			
		4900			
FEDERAL AGENCIES	1	1	1		
U.S. Environmental Protection Agency –	271-5083	271-3424			
Anchorage					
Seattle Office 24-Hr Hotline	(206) 553-1263	(206) 553-			
		0124			
U.S. Department of the Interior	271-5011	271-4102			
NOAA Scientific Support Coordinators	(428)-		529-9157		
	4160/4143				
Chugach National Forest	743-9433	743-9592			
U.S. Army Corps of Engineers (Security Office)	229-9100				
U.S. Navy SUPSALV	384-2968	384-2969			
Federal Aviation Administration (Ops Center)	(425)-227-1999				
National Marine Fisheries	271-5195				
National Weather Service	266-5167	266-5188	266-5105		

## 9210.1 – Trustees for Natural Resources

A copy of the natural resource trustee emergency contacts is maintained on the Alaska Regional Response Team website, under "Members and Contacts" at <a href="http://www.alaskarrt.org">http://www.alaskarrt.org</a>

#### 9210.2 - USCG

Over 1200 personnel are permanently assigned to 42 USCG units throughout Alaska. These personnel operate resources and perform many duties related to maritime safety and security as well as internal administration. As outlined in COMDTINST 16165.41, the resources of districts are available to the FOSC during a pollution response as the District Response Group (DRG).

Airports Accessible by C-130: There are approximately 100 or more airports in the State of Alaska that are accessible by USCG and other military C-130 aircraft. Since airport information is updated on a frequent basis, rather than list the airports and specific information on each airport, the following website is provided for specific information regarding airports that may be used to support an oil or hazardous substance spill response. http://www.dot.state.ak.us/stwdav/AirportList.shtml#central

Agency	Phone	Alt. Phone	Fax
National Response Center	800-424-8802	202-267-2675	202-267-2165
			202-372-8411
National Pollution Funds Center	703-872-6000		703-872-6900
USCG District 17 Command Center	463-2000		463-2023
USCG – Sector Anchorage	428-4100		428-4114
USCG District 17 Public Affairs	463-2065		463-2072
USCG Pacific Strike Team	415-883-3311	415-559-9908	415-883-7814
National Strike Force	252-331-6000		252-331-6012

## 9210.2.1 – USCG National Strike Force (NSF)

The National Strike Force (NSF) was created in 1973 as a Coast Guard "Special Team" under the National Oil and Hazardous Substances Pollution Control Plan (National Contingency Plan), designed to support the Coast Guard, Environmental Protection Agency (EPA), and Department of Defense (DoD) pre-designated Federal On-Scene Coordinators (FOSCs) in their preparedness and response duties including responding to potential and actual oil and hazardous material spills and weapons of mass destruction incidents as directed by the National Contingency Plan (NCP). The NSF is composed of four units: the National Strike Force Coordination Center (Elizabeth City, NC), the Atlantic Strike Team (Fort Dix, NJ), the Gulf Strike Team (Mobile, AL), and the Pacific Strike Team (Novato, CA). The USCG National Strike Force Coordination Center (NSFCC) coordinates the three Coast Guard Strike Teams and the Public Information Assist Team (PIAT). The NSFCC also carries out several national preparedness missions directly supporting FOSCs. Each FOSC has a specific Strike Team designated for initial contact and may contact that team directly for any assistance. A FOSC may directly request PIAT assistance by contacting the NSFCC or any Strike Team.

The National Strike Force is one of the deployable specialized forces (DSF) managed by the Deployable Operations Group (DOG). However, unlike the other DSFs requiring a request for forces, a Federal On-Scene Coordinators can request NSF assistance directly by contacting their servicing Strike Team or contacting the NSFCC.

## **Contact Numbers**

National Strike Force	(252) 331-6000
Coordination Center	(252) 331-6012 FAX
1461 North Road St.	(252) 267-3458 CDO
Elizabeth City, NC 27909	
Atlantic Strike Team	(609) 724-0008
5614 Doughboy Loop	(609) 724-0232 FAX
Fort Dix, NJ 08640-0068	(609) 556-9376 OOD
Gulf Strike Team	(251) 441-6601
8501 Tanner Williams Rd.	(251) 441-6610 FAX
Mobile, AL 36608-9690	(251) 447-5545 OOD
Pacific Strike Team	(415) 883-3311
Hanger 2, Hamilton Field	(415) 883-7814 FAX
Novato, CA 94949-5082	(415) 559-9405 OOD

To request National Strike Force assistance, contact your servicing Strike Team at the number listed above; or the NSFCC at 252-331-6000 (after hours through the CDO at 252-267-3458); or the National Response Center at 800-424-8802.

NSF website: <a href="http://www.uscg.mil/hq/nsfweb">http://www.uscg.mil/hq/nsfweb</a>
DOG website: <a href="http://www.uscg.mil/pacarea/dog/">http://www.uscg.mil/pacarea/dog/</a>

# **NSF STRIKE TEAM AREAS OF RESPONSIBILITY**

Docidio Chrileo Toore	T	As OF RESPONSIBILITY	Public Information
Pacific Strike Team	Gulf Strike Team	Atlantic Strike Team	Assist Team
Sectors/MSU's	Sectors/MSU's/MSD's	Sectors/MSU's	All Sectors, MSUs, & EPA Regions
Sector Anchorage, AK	Sector North Carolina	Sector Northern New England-	
MSU Valdez, AK	MSU Wilmington, NC	Portland, ME	
Sector Juneau, AK	Sector Charleston, SC MSU Savannah, GA	Sector Baltimore, MD	
Sector Puget Sound, WA	Sector Jacksonville, FL	Sector Boston, MA	
Sector Columbia River MSU Portland	Sector St. Petersburg - Tampa, FL	Sector New York, NY	
Sector San Francisco, CA	Sector Miami, FL	Sector Long Island Sound – New Haven, CT	
Sector Los Angeles/Long Beach, CA	Sector Key West, FL	Sector Southern New England- Providence, RI	
Sector San Diego, CA	Sector Mobile, AL	Sector Delaware Bay- Philadelphia, PA	
Sector Honolulu, HI MSD American Samoa	Sector New Orleans, LA	Sector Hampton Roads, VA	
Sector Guam MSU Baton Rouge, LA MSU Morgan City, LA MSU Houma, LA		Sector San Juan, PR	
		Sector Sault Ste Marie, MI MSU Duluth, MI	
	Sector Houston- Galveston, TX MSU Galveston, TX MSU Port Arthur, TX MSU Lake Charles, LA	Sector Michigan-Milwaukee, WI MSU Chicago, IL Sector Buffalo, NY MSU Cleveland, OH	
	Sector Corpus Christi, TX	Sector Detroit, MI MSU Toledo	
	Sector Ohio Valley - Louisville, KY MSU Paducah, KY	Sector Upper Mississippi River, St. Louis, MO	
	Sector Lower Mississippi- Memphis, TN	Sector Ohio Valley, KY MSU Pittsburgh, PA MSU Paducah, KY	
		MSU Huntington, WV	
EPA Regions	EPA Regions	EPA Regions	
VIII	IV	I	
IX	VI	II	
Χ		III	
Oceania (Hawaii, Guam, Pacific Islands)		V	
		VII	

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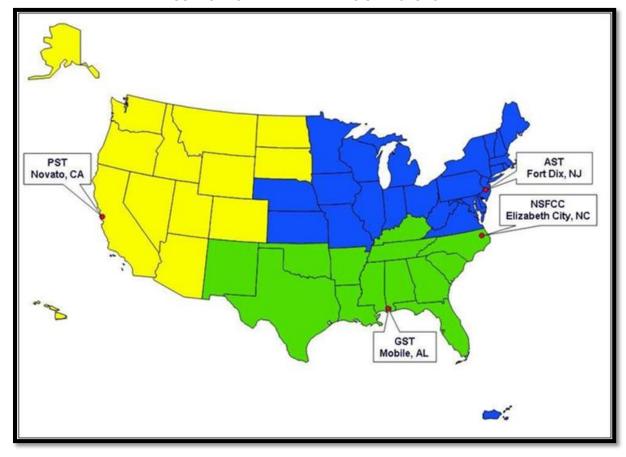


FIGURE 9-1: STRIKE TEAM AREAS OF RESPONSIBILITY

## **NATIONAL STRIKE FORCE CAPABILITIES**

- Respond with trained personnel and specialized equipment to prevent, contain and/or remove spills of oil and releases of hazardous material;
- Provide spill management expertise;
- Provide guidance for preplanning and response to weapons of mass destruction incidents;
- Assist with response planning and consultation;
- Conduct operational training in oil and chemical spill response techniques and equipment usage;
- Participate with the response, coordination, control and evaluation of National Preparedness for Response Exercise Program (PREP) training and exercises;
- Technical assistance, equipment and personnel to augment the FOSC staff during incident response;
- Identify, locate, and assist in the transportation of specialized equipment needed for any type of response;
- Provide support from the Public Information Assist Team (PIAT) to FOSCs during incident responses or exercise training;
- Assist in coordinating the use of private and public resources in support of the FOSC during a response to or a threat of a worst case incident;
- Review Area Contingency Plans (ACP), including evaluation of equipment readiness and coordination among responsible public agencies and private organizations;

- Assist in location of spill response resources for both response and planning, using the DOG NSFCC's national and international computerized inventory of spill response resources in the Response Resource Inventory (RRI) data base which includes the OSRO/PAV programs;
- Inspection of district pre-positioned pollution response equipment.

## **REQUESTING STRIKE TEAM ASSISTANCE**

- Requesting assistance from any one Strike Team, an FOSC immediately gains access to the entire NSF personnel roster and equipment inventory.
- FOSCs are encouraged to contact the NSF when:
- Control of the discharge requires the special knowledge or special equipment of the NSF;
- Response will require in excess of two days to complete removal operations and augmentation by NSF personnel will release local forces to return to normal operations;
- Responsible Party (RP) has not or will not assume control immediately of the incident and the FOSC needs an immediate response to protect the environment and or the public;
- In the judgment of the FOSC, NSF capabilities are necessary;
- Technical assistance, equipment and other resources to augment the FOSC staff during incident response or exercise training;
- Deployment of the district prepositioned pollution equipment (VOSS) or USCG SORS equipped vessel response is needed.

**STRIKE TEAM DEPLOYMENT**: Upon receiving a request, personnel and equipment will be deployed to the scene in the most expeditious manner possible. Each team maintains a state of readiness which enables them to rapidly mobilize personnel and response equipment. Strike Team response equipment is palletized, loaded, and ready for immediate deployment by truck or aircraft.

Each Strike Team is capable of dispatching responders by the fastest means possible adhering to the NSF's minimum response time criteria as the circumstances of the incident dictate:

- Mobilizing four members within 2 hours of notification
- Mobilizing eight members within 6 hours of notification
- Mobilizing heavy equipment loads within 6 hours of notification
- Additional Strike Team personnel and equipment can be mobilized within 24 hours of notification

**STRIKE TEAM FUNDING**: For responses, Strike Team personnel require travel orders or travel accounting information prior to deployment. Funding typically comes from the pollution response fund (FPN, CPN, DPN). If no pollution response fund has been accessed, the requesting unit must provide funding.

Requests for training and exercise support that are associated with PREP are generally funded through the Deployable Operations Group (exercises included in the MTEP process); however, under some circumstances, the requesting unit may be required to provide funding.

Non-PREP training and exercise support requests originating from a Federal agency, including the Coast Guard, shall be funded by the requesting agency or unit. Under most circumstances, State, County, and Municipal level-agencies will not be expected to provide funding.

**TRANSPORTATION**: Mobilization of Strike Team equipment may involve over-the-road transport: all three Strike Teams have tractor-trailer rigs that give them rapid deployment capabilities.

Aviation support is often needed during an emergency response to rapidly transport Strike Team equipment and/or personnel to the incident. When a Strike Team is requested by a FOSC/Sector Commander for assistance, the need/requirements for aviation support should be discussed. Requests for aviation support are the responsibility of the FOSC/Sector Commander. If aviation support is needed for an emergency response, the Sector should request the appropriate aviation support to Area through the District. The Strike Team can engage directly with the applicable Sector/Air Station to coordinate the aviation support requirements while the request is being processed through the District and Area..

NOTE: Since response support is time critical, early notification of Strike Team assistance (or potential assistance) will allow the teams to begin logistics planning even before a formal request is made.

## **LOGISTIC CONSIDERATIONS**

- Strike Teams make every effort to be logistically independent; however, assistance may be required from the FOSC in arranging the following support:
- Heavy lifting equipment, such as cranes and forklifts capable of handling a 16,000 lb. containment barrier box;
- Fork extensions for forklift;
- Small boats, vessels of opportunity;
- Tractor-Trailer rigs;
- Electrical power, land lines for telephones and computers,
- Local logistics @staging areas, docks, boat ramps, weather conditions, etc.
- Potable water supply and fuel supply for command posts.

Specific logistic needs will be clarified during the initial request for assistance; these needs vary, dependent upon the incident and location. Strike Teams attempt to minimize the effort by the FOSC's staff required to arrange support. However, the local knowledge of the FOSC's staff may be relied upon by the Strike Teams to make reasonable decisions regarding logistics.

**PUBLIC INFORMATION ASSIST TEAM (PIAT)**: The Public Information Assist Team (PIAT) is an element of the National Strike Force, co-located with the National Strike Force Coordination Center and is available to Federal On-Scene Coordinators. Four highly trained crisis communications professionals staff the team. The PIAT's primary function is to provide the gamut of emergency public information services during oil spills and hazardous material releases — the team also provides these services for natural disasters, domestic terrorism events and weapons of mass destruction events. Team members routinely act as the Public Information Officer for Coast Guard and Environmental Protection Agency officials responsible for mitigating oil and hazardous material incidents.

Team personnel also teach risk communication and media relations techniques, as well as ICS-based Joint Information Center organization and Public Information Officer operations to response community personnel from the Coast Guard, other federal agencies, state and local agencies and industry. Additionally, the PIAT assists in the scenario development of Coast Guard pollution response exercises and participates as evaluators or controllers during federal- and industry-led exercises.

To request the Public Information Assist Team, contact the NSFCC at 252-331-6000, or after hours through the CDO at 252-267-3458, or the NRC at 800-424-8802.

PIAT website: http://www.uscg.mil/hq/nsfweb/piat/piatindex.html

**PIAT DEPLOYMENT**: Upon receiving a request, PIAT's goal is to deploy two (2) personnel and one (1) response kit within six hours of notification, and an additional two (2) personnel within 24 hours, if necessary. All NSF members, including PIAT, deploy for a maximum of 21 days at a time.

**PIAT FUNDING**: For responses, PIAT requires travel orders or travel accounting information prior to deployment. Funding typically comes from the pollution response fund. If no pollution response fund has been accessed, funding will come from the requesting unit.

Requests for training and exercise support that are associated with PREP are generally funded through the Deployable Operations Group; however, under some circumstances, the requesting unit may be required to provide funding.

Non-PREP training and exercise support requests originating from a Federal agency, including the Coast Guard, shall be funded by the requesting agency or unit. Under most circumstances, State, County, and Municipal level-agencies will not be expected to provide funding.

## 9210.2.2 – USCG District Response Assist Team (DRAT)

The USCG District Response Group (DRG) is a framework within each USCG District to organize district resources and assets to support USCG FOSCs during a response to a pollution incident. DRGs assist the FOSC by providing technical assistance, personnel, and equipment, including the USCG's pre-positioned equipment. Each DRG consists of all USCG personnel and equipment within the district, including the District Response Advisory Team (DRAT), which is available to provide support to the FOSC in the event a spill exceeds local response capabilities. The DRAT has personnel specifically trained in pollution fund management, equipment, and environmental assessment.

## 9210.2.3 – Public Information Assist Team (PIAT)

The Public Information Assist Team (PIAT) is an element of the National Strike Force, co-located with the National Strike Force Coordination Center and is available to Federal On-Scene Coordinators. Four highly trained crisis communications professionals staff the team. The PIAT's primary function is to provide the gamut of emergency public information services during oil spills and hazardous material releases — the team also provides these services for natural disasters, domestic terrorism events and weapons of mass destruction events. Team members routinely act as the Public Information Officer for USCG and Environmental Protection Agency officials responsible for mitigating oil and hazardous material incidents.

Team personnel also teach risk communication and media relations techniques, as well as ICS-based Joint Information Center organization and Public Information Officer operations to response community personnel from the USCG, other federal agencies, state and local agencies and industry. Additionally, the PIAT assists in the scenario development of USCG pollution response exercises and participates as evaluators or controllers during federal- and industry-led exercises.

To request the Public Information Assist Team, contact the NSFCC at 252-331-6000, or after hours through the CDO at 252-267-3458, or the NRC at 800-424-8802.

PIAT website: http://www.uscg.mil/hq/nsfweb/piat/piatindex.html

**PIAT FUNDING**: For responses, PIAT requires travel orders or travel accounting information prior to deployment. Funding typically comes from the pollution response fund. If no pollution response fund has been accessed, funding will come from the requesting unit.

Requests for training and exercise support that are associated with PREP are generally funded through the Deployable Operations Group; however, under some circumstances, the requesting unit may be required to provide funding.

Non-PREP training and exercise support requests originating from a Federal agency, including the USCG, shall be funded by the requesting agency or unit. Under most circumstances, State, County, and Municipal level-agencies will not be expected to provide funding.

9210.2.4 – USCG Reserve-TBD 9210.2.5 – USCG Auxiliary-TBD

9210.3 – Environmental Protection Agency (EPA)

9210.3.1 – Environmental Response Team (ERT)

The EPA's **Environmental Response Team (ERT)** has expertise in treatment, biology, chemistry, hydrology, geology, and engineering. The ERT can provide the FOSC access to special equipment to deal with chemical releases. The ERT can also provide the FOSC with advice concerning the following:

- hazard evaluation,
- multimedia sampling and analysis,
- risk assessment,
- on site safety,
- cleanup techniques,
- water supply decontamination and protection,
- use of dispersants,
- environmental assessment,
- degree of cleanup required, and
- Disposal of contaminated materials.

The ERT offers various training courses to prepare response personnel. The EPA ERT teams are located in Edison, NJ; Cincinnati, OH; and Las Vegas, NV.

## 9210.3.2 – Radiological Emergency Response Team (RERT)

The **Radiological Emergency Response Team (RERT)** coordinates or assists federal, State, tribal, and local response efforts before, during, and following a radiological incident. There are RERT personnel at the two EPA National Radiation Laboratories in Montgomery, Alabama and Las Vegas, Nevada, as well as at the EPA's regional offices and national headquarters. RERT can provide the support in the following areas:

- technical advice and assistance to prevent or minimize threats to public health and the environment; advice on protective measures to ensure public health and safety;
- assessments of any release for dose and impact to public health and the environment;
- monitoring, sampling, laboratory analyses and data assessments to assess and characterize
  environmental impact (Staff from EPA's National Air and Radiation Environmental Laboratory and
  its Radiation and Indoor Environments National Laboratory provide monitoring and assessment
  services both at the labs and at the response site, if needed.); and

Technical advice and assistance for containment, cleanup, restoration, and recovery following a radiological incident.

# 9210.3.3 – National Decontamination Team (NDT)

The **National Decontamination Team (NDT)**, located in Cincinnati, Ohio, provides expertise and support to On-Scene Coordinators regarding the decontamination of buildings or other structures in the event of an incident involving releases of radiological, biological, or chemical contaminants.

9210.4 – National Oceanic and Atmospheric Administration (NOAA)

Agency	Phone	Alt. Phone	Fax
National Oceanic & Atmospheric Admin. SSC	428-4143		271-3139

# 9210.5 – National Oceanic and Atmospheric Administration (NOAA) 9210.5.1 – Scientific Support Coordinator (SSC)

Agency	Phone	Alt. Phone	Fax
National Oceanic & Atmospheric Admin. SSC	428-4143		271-3139

NOAA Scientific Support Coordinators (SSC) are the principal advisors to the USCG FOSC for scientific issues, communication with the scientific community, and coordination of requests for assistance from State and federal agencies regarding scientific studies. The SSC strives for a consensus on scientific issues affecting the response, but ensures that differing opinions are communicated to the FOSC. At the request of the FOSC, the SSC leads the scientific team during a response and is responsible for providing scientific support for operational decisions and for coordinating on-scene scientific activity. The SSC leads the synthesis and integration of environmental information required for spill response decisions in support of the FOSC, while coordinating with State representatives, appropriate trustees and other knowledgeable local representatives. The SSC is supported by a scientific support team that includes expertise in environmental chemistry, oil slick tracking, pollutant transport modeling, and natural resources at risk, environmental tradeoffs of countermeasures and cleanup, and information management. At the request of the FOSC, the NOAA SSC may facilitate the FOSC's work with the lead administrative trustee for natural resources to ensure coordination between damage assessment data collection efforts and data collected in support of response operations.

## 9210.4.2 – Discharge & Release Trajectory Modeling – TBD

## 9210.6 – U.S. Navy Supervisor of Diving and Salvage (SUPSALV)

Agency	Phone	Alt. Phone	Fax
U.S. Navy SUPSALV	384-2968	384-7613	384-2969

The US Navy is the federal agency most knowledgeable and experienced in ship salvage, shipboard damage control, and diving. The US Navy has an extensive array of specialized equipment and personnel available for use in these areas as well as in specialized oil containment, collection, and removal equipment.

The Supervisor of Salvage (SUPSALV) can provide salvage expertise and maintains a warehouse on each US coast stockpiled with salvage and response gear. A request for US Navy assistance is made through the FOSC or the RRT.

# 9210.7 – Agency for Toxic Substance and Diseases (ATSDR)

The Agency for Toxic Substance and Disease Registry (ATSDR):

- maintains appropriate disease/exposure registries;
- provides medical care and testing of individuals during public health emergencies;
- develops, maintains, and informs the public concerning the effects of toxic substances;
- maintains a list of restricted or closed areas due to contamination;
- > conducts research examining the relationship between exposure and illness; and
- Conducts health assessments at contaminated sites.

Additionally, the ATSDR assists the EPA in identifying most hazardous substances at CERCLA sites, develops guidelines for toxicological profiles of hazardous substances, and develops educational materials related to the health effects of toxic substances. ATSDR resources are an important tool for the FOSC to use in assessing the possible effects of an environmental emergency on the public's health.

The Agency's 24-hour telephone number is (404) 639-0615.

9210.8 - Civil Support Teams - TBD

9210.9 – Bureau of Ocean Energy Management and Regulation Enforcement - TBD

## 9220 - State Resources/Agencies

It is the responsibility of the SOSC to initiate contact with the following agencies and organizations once emergency notifications have been made. This is not an exhaustive list of state contacts, and the SOSC may notify additional parties as well as those listed below. Phone numbers are not listed in order of importance and contacts will be made at the discretion of the SOSC. Initial notifications will be made by telephone, with concurrent transmission of any available documents (e.g. Sitrep or other information) by fax or e-mail whenever possible. Additional state agency contacts are listed in the Resources Section of this plan.

ALASKA STATE AGENCIES			
ADEC Central Alaska Response Team	269-3063	269-7648	
After Hours Spill Reporting Hotline	1-800-478- 9300		
Alaska Department of Fish and Game	267-2541	267-2499	
Department of Military & Veteran Affairs	428-7100	428-7009	
Division of Homeland Security & Emergency Management (24 Hr)	428-7000	428-7009	1-800-478-2337
Department of Labor: AK Occupational Safety & Health	1-800-770- 4940		1-800-321-6742
Department of Law	269-5100	278-7022	269-6011
Department of Natural Resources	269-8565	269-8913	317-4446
Division of Oil and Gas (paging terminal)	269-8800	269-8939	
State Historic Preservation Office	269-8721	269-8908	269-8714
Office of Project Management & Permitting	269-8629	269-5673	
Department of Public Safety (Dispatch)	428-7200	428-7204	
State Troopers (24 Hr)	1-800-478- 9300		
Department of Transportation & Public Facilities	269-0770	248-1573	

Dept. of Commerce, Com	munity and Economic	465-2500	465-2563	
Development		403-2300	403-2303	
Dept. of Health and Socia	l Services (Emergency	465-3027	465-4101	
Programs)		403-3027	403-4101	
INDUSTRY ORGANIZATIO	INS			
Alaska Chadux Corporation	on	348-2365	348-2330	348-2348
Ship Escort Response Ves	sel Service (SERVS) of	024 6620		
Alyeska Terminal		834-6620		
Alyeska Pipeline Service C	Company	834-6620		
NATIVE GROUPS/CORPO	RATIONS			
Ahtna Inc. (for inland inci	dents)	822-3476	822-3495	868-8250
Alaska Inter-Tribal Council		563-9334	563-9337	
Chugach Alaska Corporation (for marine/coastal		563-8866	563-8402	563-8866
incidents)		303-8800	303-8402	262-0343
Copper River Native Asso	ciation	822-5241	822-8801	
See the Resources Section	n, Part Three (page B-90)			
for individual tribal conta	ct information.			
The Tatitlek Corporation,	Cordova	424-3777		1-877-475-3777
The Eyak Corporation, Cordova		424-7161	424-5161	1-800-478-7161
Chenega Corporation, Anchorage		277-5706	277-5700	
REGIONAL CITIZENS ADVISORY COUNCILS				
Prince William Sound	Valdez Office	834-5000	835-5926	1-800-478-7221
RCAC	Anchorage Office	277-7222	277-4523	751-4489
Cook Inlet RCAC		283-7222	283-6102	1-800-652-7222

9220.1 - Government Official Liaisons - TBD

# 9220.2 – Alaska Department of Natural Resources

9220.2.1 – State Historic Preservation Office (SHPO)

Guidelines about how to ensure that preparedness and emergency response activities take historic properties protection into account is provided in the *Alaska Implementation Guidelines for Federal On-Scene Coordinators for the Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Pollution Contingency Plan.* This document is found in the Regional Contingency Plan.

Consistent with the guidelines, questions about historic properties preparedness and response activities should be directed to:

Alaska Department of Natural Resources, Office of History and Archaeology (SHPO)			
Special Projects Archaeologist	269-8723		
State Archaeologist	269-8728		
Mainline/Desk	269-8721		
U.S. Department of the Interior			
Office of Environmental Policy and Compliance	271-5011		

# 9220.3 - Trustees for Natural Resources

The following provides information for natural resource trustee emergency contacts:

Emergency Contact	Work	Cell	Fax	Email	
U.S. Department of the		JUII -	7 4 7	=	
1. Philip Johnson	271-5011	227-3781	271-4102	philip johnson@ios.doi.gov	
Grace Cochon	271-5011	227-3781	271-4102	grace cochon@ios.doi.gov	
U.S. Department of Com		227 3701	271 4102	grace_cochoneros.aor.gov	
0.5. Department of com	(206)	T	T		
	526-4563	(206) 890-	(202) 526-		
1. Doug Helton	(206)	7760	6329	doug.helton@noaa.gov	
	526-4911	7700	0323		
2. Brad Smith	271-5006	271-3030		brad.smith@noaa.gov	
	(206)	(206) 369-	(206) 526-		
3. Rob Wolotira	526-4360	6254	6665	robert.wolotira@noaa.gov	
U.S. Department of Agri			1 0000		
1. Sam Carlson	586-8789		586-7555	samcarlson@fs.fed.us	
Gary Sonnenberg	586-8882		586-7555	gsonnenberg@fs.fed.us	
U. S. Department of Def	il		1000.000		
Alaskan Command (CP)	552-2100		552-8262		
Elmendorf Air Force					
Base (CP)	552-3000		552-5102	daniel.barnett@elmendorf.af.mil	
Eielson Air Force Base					
(CP)	377-1500		377-2724	max.johnson@eielson.af.mil	
King Salmon, Galena,					
and Long Range Radar	552-3000		552-5102	timothy.imdieke@elmendorf.af.mil	
Stations (CP)					
U.S. Army (Fort					
Wainwright, Fort	204 6666				
Greely, Fort	384-6666		384-1141	terry.boone@us.army.mil	
Richardson) (CP)					
Alaska Department of Er	nvironmenta	l Conservatio	n		
1. Gary Folley	262-3411	398-4368	262-2294	gary.folley@alaska.gov	
2. Rick Bernhardt	269-7683	242-4087	269-7648	rick.bernhardt@alaska.gov	
Alaska Department of Fi	sh and Game	e			
1. Jeanette Alas	267-2805		267-2499	jeanette.alas@alaska.gov	
2. Jacob Cunha	267-2143		267-2499	jacob.cunha@alaska.gov	
Alaska Department of N	atural Resou	irces		<u> </u>	
1. Clark Cox	269-8565		269-8913	clark.cox@alaska.gov	
2. Cliff Larson	269-8508		269-8913	cliff.larson@alaska.gov	
Alaska Department of La	w				
Steve Mulder	269-6011		278-7022	steve.mulder@alaska.gov	
2. Breck Tostevin	269-5100		278-7022	breck.tostevin@alaska.gov	
3. Kamie Willis	269-8627		278-7022	kamie.wilis@alaska.gov	
NOTES: CP = Command Post		1	1		

**NOTES:** CP = Command Post

1 = Primary Contact

2 = lst Alternate Contact

3 = 2nd Alternate Contact

9220.4 – State Emergency Response Committees (SERC)

Emergency Management Assistance and Other Assistance				
Location/Borough	Point of Contact	Phone Number		
Anchorage	Office of Emergency Mgt	343-1401/1400		
Bethel	Bethel Fire Department	543-3121		
Bristol Bay Borough	Borough Fire Department	246-4224		
Cordova	Fire Department	424-6117		
Dillingham	Fire Department	842-2288		
Fairbanks North Star Borough	Office of Emergency Mgt	459-1481		
Fort Yukon	Police Department	662-2311		
Haines	Police Department	766-2121		
Juneau	Emerg Mgt Coordinator	586-0221		
Kenai Peninsula Borough	Office of Emergency Mgt	262-4910		
Ketchikan Gateway Borough	Planning Department	228-6618		
City of Kodiak	Fire Department	486-8040		
Kotzebue	Fire Department	442-3351		
Mat-Su Borough	Dept of Emergency Services	3861-8000		
Nome	Office of Public Safety	443-7824		
North Slope Borough	NSB Search and Rescue	852-0284		
Northwest Arctic Borough	Public Services Director	442-2500		
Petersburg	Fire Department	772-3355		
Sand Point	Director of Public Safety	383-3700		
Sitka	Fire Department	747-3233		
Unalaska	Dept of Public Safety	581-1233		
Valdez	Police Department	835-4560		
Whittier	Police Department	472-2340		
Wrangell	Police Department	874-3304		

For a complete listing of Local Emergency Planning Committee (LEPC) chairpersons, Reference the State of Alaska, Dept of Military and Veterans Affairs Internet home page at:

http://ready.alaska.gov/SERC/documents/Nov%202017%20LEPC%20Contact%20List\_public.pdf

## 9220.5 – Alaska State Troopers

Follow this link for the Trooper Post Contact Information: <a href="https://dps.alaska.gov/ast/contacts">https://dps.alaska.gov/ast/contacts</a>

Cordova 424-3184 Glennallen 822-3263 Northway 778-2245 Tok 883-5111 Valdez 835-4307

## 9220.8 – Alaska Statewide HAZMAT Teams

Follow this link for contact information of the Statewide Hazmat Workgroup Members: <a href="http://dec.alaska.gov/spar/ppr/hazmat.htm">http://dec.alaska.gov/spar/ppr/hazmat.htm</a>

9220.8.1 – Civil Support Team - TBD

# 9220.9 Emergency Managers

The following table lists local emergency managers for Copper River and Valdez. Complete list of Local Emergency Planning Committee members can be found at the following website:

# http://ready.alaska.gov/SERC/LEPC\_Home

LOCAL EMERGENCY MANAGERS			
LOCATION	POINT OF CONTACT	PHONE NUMBER	
Copper River	Libby Bengtson	822-3203	
Valdez	Joshua Buffington	831-9042	

# 9230 - Tribal Resources/Agencies

# 9230.1 - Federally-recognized Tribes

The following are the Federally-Recognized Tribes in the Prince William Sound Area: Most recent updates to the list can be viewed from the Department of the Interior, Bureau of Indian Affairs website: http://www.bia.gov/WhoWeAre/BIA/OIS/TribalGovernmentServices/TribalDirectory/index.htm

TRIBE	ADDRESS	PHONE	FAX
Native Village of Chenega	P.O. Box 8079	573-5132	
(aka Chegena IRA Council)	Chenega Bay, AK 99574	373 3132	
Cheesh'na Tribal Council	P.O. Box 357	822-5399	822-5810
	Gakona, AK 99586	022 3333	
Native Village of Chitina	P.O. Box 31	823-2215	823-2233
	Chitina, AK 99566	023 2213	
Native Village of Eyak	110 Nicholoff Way		424-7739
(Cordova)	P.O. Box 1388	424-7738	
(Cordova)	Cordova, AK 99574		
Native Village of Gakona	P.O. Box 102	822-5777	822-5997
Native village of Gakoria	Gakona, AK 99586	022 3777	
Native Village of Kluti-Kaah	P.O. Box 68	822-5541	822-5130
(aka Copper Center)	Copper Center, AK 99573	022-3341	
Mentasta Traditional Council	P.O. Box 6019	291-2319	291-2305
	Mentasta Lake, AK 99780	231 2313	
Northway Village Council	Circle Drive		
	P.O. Box 516	778-2311	
	Northway, AK 99764		
Native Village of Tanacross	P.O. Box 76009	883-5024	
	Tanacross, AK 99776	883-3024	
Native Village of Tatitlek	P.O. Box 171	325-2311	
	Tatitlek, AK 99677	323 2311	
Native Village of Tazlina	P.O. Box 87	822-4375	822-5865
	Glennallen, AK 99588	022-4373	022 3003
Native Village of Tetlin	P.O. Box 797	883-2021	
	Tok, AK 99780	003-2021	

9230.2 – Native Corporations

9230.2.1 - Regional Native Corporations

CORPORATIONS	ADDRESS	PHONE/FAX	EMAIL/WEBSITE
Abtas Incorporated	P.O. Box 649	822-3476/	manderson@ahtna.net
Ahtna, Incorporated	Glennallen, AK 99588	822-3495	www.ahtna-inc.com
Chugach Alaska Corporation	3800 Centerpoint Drive Suite 1200 Anchorage, AK 99503	563-8866/ 563-8402	www.chugach.com
Doyon, Limited	1 Doyon Place, Suite 300 Fairbanks, AK 99701	459-2000 (888) 478-4755/ 459-2060	info@doyon.com www.doyon.com

9230.2.2 - Village Corporations

CORPORATIONS	ADDRESS	PHONE/FAX	EMAIL/WEBSITE
Chenega	3000 C Street, Suite 301	277-5706/	www.chenega.com
Corporation	Anchorage, AK 99503	277-5700	www.chenega.com
Chitina Native	P.O. Box 3	823-2223/	Chitin_native@cvinternet.net
Corporation	Chitina, AK 99566	823-2202	www.chitinanative.com
Tanacross,	P.O. Box 76029	883-4130/	www.tanacrossins.com
Incorporated	Tanacross, AK 99776	883-4129	www.tanacrossinc.com
Tatitlek	561 East 36 <sup>th</sup> Avenue	278-4000/	www.tatitlek.com
Corporation	Anchorage, AK 99503	278-4050	www.tatitlek.com
Valdez Native	P.O. Box 1108	835-4951	www.chugachmiut.org/tribes/vald
Association	Valdez, AK 99686	055-4951	<u>ez.html</u>
The Eyak	901 LeFevre Street	424-7161	info@eyakcorp.com
•	P.O. Box 340	(800) 478-7161/	
Corporation	Cordova, AK 99574	424-5161	www.eyakcorporation.com

The Alaska Department of Commerce, Community and Economic Development, Division of Community and Regional Affairs located in Anchorage (269-4527) maintains a complete listing of villages and village corporations associated with the Municipal Lands Trustee (MLT) Program.

http://commerce.state.ak.us/dnn/dcra/PlanningLandManagement/MunicipalLandTrusteeProgram.aspx

9230.3 - Other Regional Native and Tribal Organizations - TBD

# 9240 - Local Resources/Agencies

It is the responsibility of the LOSC to initiate contact with the following local government agencies and organizations once emergency notifications have been made. Local plans may designate who will serve as the LOSC, who has responsibility for making any necessary contacts, and who should be contacted. Each town, village or community may have their own emergency response plan, and all applicable local plans should be consulted during an emergency situation.

This list of local contacts is not exhaustive, and the LOSC may notify additional parties as well as those listed below. Phone numbers are not listed in order of importance and contacts should be made at the discretion of the LOSC. Initial notifications will be made by telephone, with concurrent transmission of any available documents (e.g. Sitrep or other information) by fax or e-mail whenever possible.

Phone/Fax

# **Local Emergency Planning Committee**

Valdez LEPC	835-4473/835-4900
Cities/Villages	
City of Cordova	424-6200
State Troopers	
Police	
Fire	
Hospital	
Clinic	
Harbormaster	
City of Valdez	835-4313
State Troopers	
Police	
Fire	
Hospital	
Native Tribe Clinic	
Harbormaster	
City of Whittier	472-2327/472-2404
Police Department	
Fire Department	
Tunnel Fire Department	
Health Clinic	
Harbormaster	
Harbormaster - Alyeska/SERVS contact	
Chenega Bay, Village Council	573-5132
Village Public Safety Officer	
Health Clinic	
Chistochina, Village Council	822-3503
Fire Department (volunteer)	
Health Clinic	
Chitina, Village Council	823-221
Fire Department (emergency only)	
Clinic	
Copper Center	
Fire Department (volunteer)	822-4385
Health Clinic (Sierra & Kluti-Kaah)	
Gakona, Village Council	822-366
Fire Department (volunteer)	
	822-517

Glenr	nallen	
	State Troopers	822-3263
	Fire Department (volunteer)	259-6288
	Clinic (Cross Road Medical Center)	822-3203
Gulka	ana, Village Council	822-3746
	Fire Department (volunteer)	822-3172
	Clinic	822-3646
Kenn	ny Lake	
	Fire Department (volunteer)	960-3762
McCa	arthy, Area Council	554-4405
	Fire Department	554-2102
Ment	tasta, Village Office	291-2319
	Fire Department (volunteer)	291-2319
	Clinic	291-2320
Nativ	ve Village of Eyak	424-7738
	State Troopers/Village Public Safety Officer (Dispatch Line)	424-6100
	Fire Department (volunteer)	
	Cordova Medical Hospital	
	Ilanka Health Center	424-3622
North	hway	
	State Troopers	
	Fire Department (volunteer)	
	Clinic	778-2283
Tana	cross, Village Council	
	Clinic	883-4132
Tazlir	na, Village Council	
	Fire Department (volunteer)	
	Clinic	822-4385
Tetlir	n, Village Council	
	Clinic	324-2152
Tok		
	State Troopers	
	Fire Department (volunteer)	883-5726
Villag	ge of Tatitlek	
	Village Public Safety Officer	
	Fire Department (Valdez services)	
	Clinic	325-2235

CULTURAL RESOURCES ADVISORS	
State Historic Preservation Office (ADNR)	269-8721
HATCHERIES/AQUACULTURE SITES	See the Sensitive Areas Section
ALASKA REGIONAL RESPONSE TEAM	
Refer to the ARRT website at: <a href="http://alaskarrt.org/">http://alaskarrt.org/</a> for the most contains the first of the most contains the first of the most contains the first of th	urrent listing of ARRT members.
CHEMTREC (24-hr)	1-800-424-9300
Hazardous substances information provided by the Chemical Manu	facturers Association

#### 9240.1 Community Profiles

The information included in the following profiles is meant to assist responders by providing the most vital contacts and useful facts available for a community. Efforts have been made to provide the most current information, but things change. Also, information is still being sought for some categories, such as potential command posts and staging areas and, most particularly, a town or village's chosen priority locations for protection in case of a spill. The plan holders welcome any input that might make this a more useful and instructive document.

Be aware that most of the smaller villages have no organized fire department, volunteer or otherwise. Law enforcement varies from village to village. Some may have a city government-backed police department, though it may only consist of a chief and one officer. Most Native villages have a Village Public Safety Officer (VPSO), a position that generally receives funding through both a Native corporation and the state's Dept. of Public Safety, from which they also receive training. A few villages have a Village Police Officer (VPO) or a Tribal Police Officer (TPO), positions that are contracted directly by the local government or tribal council, respectively.

To update information in these community profiles, please submit your information to the following:



# Alaska Department of Environmental Conservation Prevention and Emergency Response Program

Attn: Preparedness Section 555 Cordova Street Anchorage, AK 99501

Phone: 269-7682 or 7683 / Fax: 269-7648 Email: DEC.Areaplans@alaska.gov



# U.S. Coast Guard Marine Safety Unit Valdez

Attn: Contingency Planning

P.O. Box 486 Valdez, AK 99686

Work: 835-7216 / Fax: 835-7207

Email:



The Area Committee distributed to all of the communities in the area requesting pertinent information about the community, such as housing possibilities, spill response equipment and possible command center locations or staging area. Included was request for the community to list the top five priority locations or sensitive areas that the community deemed most important for protection if a spill should occur. All completed lists returned by the communities have been included in the respective village's community profile and in the Sensitive Area Section.

Additional details, including historical and cultural information, are provided in the Community Profiles available on the internet at the Alaska Department of Commerce, Community and Economic Development website: http://commerce.alaska.gov/dnn/dcra/Home.aspx

# CHENEGA BAY COMMUNITY PROFILE

#### **Location and Climate**

Chenega Bay is located on Evans Island at Crab Bay, 42 miles southeast of Whittier in Prince William Sound. It is 104 air miles southeast of Anchorage and 50 miles east of Seward. It lies at approximately 60.06571° N Latitude and -148.01038° W Longitude. (Sec. 24, T001S, R008E, Seward Meridian) Chenega Bay is located in the Valdez Recording District. Winter temperatures range from 17 to 28; summer temperatures range 49 to 63. Average annual precipitation includes 66 inches of rain and 80 inches of snowfall.

The name of this Alutiiq village was first reported by Ivan Petroff in the 1880 census. At that time, the village was located on the southern tip of Chenega Island. A post office was established in 1946. The village was destroyed and over half of all residents perished by tsunamis in the Sound after the 1964 earthquake. The village was reestablished twenty years later on Evans Island, at the site of the former Crab Bay herring saltery. In the summer of 1984, 21 homes, an office building, community hall, school, two teacher's houses, a church and community store were constructed.

# History, Culture, & Demographics

**Economy** 

Subsistence

**Native Entities** 

A federally recognized tribe is located in the community – the Native Village of Chenega. The 52.63% of the population are Alaska Native or part Native. Chenega Bay is an Alutiiq community practicing a subsistence and commercial fishing lifestyle. During the 2010 U.S. Census, there were 51 total housing units, and 21 were vacant. Fourteen of these vacant housing units are used only seasonally. The median household income was \$45,833, per capita income was \$16,366, and 26.09% of residents were living below the poverty level.

Commercial fishing and subsistence activities are the focus of the economy. One resident hold commercial fishing permit. The school, health clinic, and tribal council provide some

employment.

Residents of Chenega Bay hunt, fish and gather for the following food sources in and around Prince William Sound: salmon, halibut, deer, waterfowl, seal sea lions, herring/spawn, bear, oysters, clams, octopus and berries.

Population 76 (2010 U.S. Census)
Borough Located In Unorganized
Incorporation Type Unincorporated

Regional: Chugach Alaska Corporation (Anchorage)
Profit: Chenega Corporation (Anchorage)
Nonprofit: Chugachmiut (Anchorage)

Village: Native Village of Chenega (Federally Recognized Tribe)

# **EMERGENCY SERVICES**

 VPSO
 State VPSO (573-2046)

 Fire
 State VPSO (573-2046)

Medical Chenega Bay Health Clinic (573-5129). Auxiliary care provided by Chenega Bay EMS.

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Chugach Alaska Corporation	3800 Centerpoint Drive, Suite 700 Anchorage, AK 99503	561-2668 562-5258 (fax)	www.chugach-ak.com randi.gause@chugach-ak.com	
Chugachmiut	1840 Bragaw Street, Suite 110 Anchorage, AK 99508-3463	562-4155 563-2891 (fax)	www.chugachmiut.org	
Native Village of	P.O. Box 8079	573-5132	s.angaiak@nativevillageofchagega.com	
Chenega	Chenega Bay, AK 99574-8079	573-5120 (fax)		
North Pacific Rim	8300 King Street	562-1444	www.nprha-ak.or/index.htm	
Housing Authority	Anchorage, AK 99518	562-1445 (fax)	www.npma-ak.or/muex.ntm	
PWS Economic	2207 Spenard Road, Suite 207	222-2440	www.pwsedd.org	
Development District	Anchorage, AK 99503	222-2411 (fax)	www.pwseuu.org	
Chenega Corporation	3000 C Street, Suite 301 Anchorage, AK 99503	277-5706 277-5700 (fax)	www.chenega.com	

**TRANSPORTATION** Chenega Bay is an isolated community accessible only by air or water. Charter airlines provide Accessibility the majority of the transportation and the Alaska Marine Highway Ferry System provides weekly ferry service year round. A 3,000-feet gravel runway and float plane landing area are available. Scheduled and chartered **Airport Facilities** 

flights depart from Cordova, Valdez, Anchorage, and Seward.

**Airline Services** Copper Valley Air Freight None identified

Chenega Bay has a small boat harbor and dock, and ferry dock. The Alaska State Ferry provides Vessel Support:

"whistle-stop" service (www.FerryAlaska.com)

**FACILITIES & UTILITIES** Telephone AT&T (Long Distance): 1-800-288-2020 / www.att.com Wireless and Internet GCI: 1-800-800-4800 / www.gci.net COMMUNICATIONS Service Provider HughesNet: 1-866-687-7094 / www.isatelliteinternet.com **TV Stations** Satellite KCHU Public Radio: 835-4665 (office) / 835-4671 (news) / news@kchu.org / **Radio Stations** www.kchu.org Cable Provider Teleconferencing Alaska Teleconferencing Network; Valdez Legislative Information Office Electricity Provided by Chenega Bay Utilities Fuel Gasoline and diesel Fuel Storage Tank Owner: Village Council / Number of Tanks: 4 / Tank Capacity: (2) 12,000 gals, (2) 3,000 gals Housing

Chenega IRA Council has housing with 14 people capacity. Call 573-5132 for availability. A surface water collection system with a dam, treatment, and storage capacity of 50,000 gallons,

allows for piped distribution most homes. Approximately 80 % of the resident's homes are fully plumbed. Sewage is piped to a 20,000-gallon community septic tank; some homes use individual septic tanks; some homes use individual septic tanks.

Refuse collection services are provided through the Chenega IRA Council, who operates the Chegena Bay Landfill. An oil and hazardous waste recycling center was completed in 1998.

ADEC Landfill Classification is Class III and the permit number is 0023-BA003. The landfill permit

expired on September 26, 2006. There is no record of permit renewal.

#### SPILL RESPONSE SUPPORT

Local Spill Response Equipment

Water & Sewage

Miscellaneous

(Contact local officials to determine possibility of using community facilities.)

Potential Command Posts Contact IRA council for available facilities (573-5131)

Airport, National Guard Armory, and Other government facilities. You and also lease **Potential Staging Areas** land through the Chenega Corporation. Alyeska Pipeline Services Company has lease agreement in place with the Chenega Corporation.

> Emergency response equipment owned by SERVS is located near the deep-water dock in the village (conexes containing boom, skimmers etc.) with additional conexes along a small stretch of beach in the village. Additional emergency response equipment is located at the Sawmill Bay Hatchery, which is adjacent to the village. The SERVS fishing vessel administrator is responsible for deployment of this equipment in a crisis. The

fishing vessel administrator lives in the community year around.

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# CORDOVA COMMUNITY PROFILE

#### **Location and Climate**

Cordova is located at the southeastern end of Prince William Sound in the Gulf of Alaska. The community was built on Orca Inlet, at the base of Eyak Mountain. It lies 52 air miles southeast of Valdez and 150 miles southeast of Anchorage. It lies at approximately 60.54278° N Latitude and -145.7575° W Longitude. (Sec. 28, T015S, R003W, Copper River Meridian.) Cordova is located in the Cordova Recording District. Winter temperatures average from 17° to 28° F; summer temperatures average 49° to 63° F. Annual precipitation is 167 inches, including 80 inches of snowfall.

The area has historically been home to the Alutiiq, with the addition of migrating Athabascan and Tlingit natives who called themselves Eyaks. Alaskan Natives of other descents also settled in Cordova. Orca Inlet was originally named "Puerto Cordova" by Don Salvador Fidalgo in 1790. One of the first producing oil fields in Alaska was discovered at Katalla, 47 miles southeast of Cordova, in 1902. The town of Cordova was named in 1906 by Michael Heney, builder of the Copper River and Northwestern Railroad, and the City was formed in 1909. Cordova became the railroad terminus and ocean shipping port for copper ore from the Kennecott Mine up the Copper River. The first trainload of ore was loaded onto the steamship "Northwestern," bound for a smelter in Tacoma, Washington, in April 1911. The Bonanza-Kennecott Mines operated until 1938 and yielded over \$200 million in copper, silver and gold. The Katalla oil field produced until 1933, when it was destroyed by fire. Fishing became the economic base in the early 1940s. Cordova has a significant Eyak Athabascan population with an active Village Council. Commercial fishing and subsistence are central to the community's culture.

# History, Culture, & Demographics

The 2010 U.S. Census data showed 8.84% of the population are Alaska Native or part Native. The census data also showed 1,100 total housing units, and 178 were vacant, of which 72 units are used only seasonally. The median household income was \$91,477, per capita income was \$38,287, and 2.04% of residents were living below the poverty level. Cordova supports a large fishing fleet for Prince William Sound and several fish processing plants. 343 residents hold commercial fishing permits, and nearly half of all households have someone working in commercial harvesting or processing. Copper River red salmon, pink salmon, herring, halibut, bottom fish and other fisheries are harvested. Reduced salmon prices

salmon, herring, halibut, bottom fish and other fisheries are harvested. Reduced salmon prices have affected the economy. The largest employers are North Pacific Processors, Cordova School District, Cordova Hospital, the City, and the Department of Transportation. The U.S. Forest Service and the U.S. Coast Guard maintain personnel in Cordova.

#### Subsistence

**Economy** 

While the largest portion of Cordova residents do not live a subsistence lifestyle, the tribal residents still practice the subsistence way of life. The food gathered is salmon, seal, deer, waterfowl, berries, and halibut.

# Population Borough Located In Incorporation Type Native Entities

Unorganized Home Rule City

2,239 (2010 U.S. Census)

Regional: Chugach Alaska Corporation

**Profit:** Tatitlek Corporation – Cordova and the Eyak Corporation

Nonprofit: Chugachmiut
Village: Native Village of Eyak

# **EMERGENCY SERVICES**

Medical

Police City Police Dept. (424-6100); State Fish & Wildlife Protection

State Troopers State Trooper :Post (424-3184)

Fire City Fire Dept. & Volunteer Fire/EMS/Search & Rescue (424-6117)

The hospital is a qualified Acute Care and Long Term Care facility (424-8000). Auxiliary care provided by Cordova Volunteer Fire Dept./EMS/Search & Rescue (424-6117/424-6100). Cordova Medical Clinic (424-8200)

Harbormaster 424-6400

#### LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES

EGGAE CONTACTS & REGIONAL STATE ONGANIZATIONS WITH EGGAE OFFICES			
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL
Chugach Alaska Corporation	3800 Centerpoint Drive Suite 700 Anchorage, AK 99503	561-2668 562-5258 (fax)	www.chugach-ak.com
City of Cordova	P.O. Box 1210	424-6200	www.cityofcordova.net

		Cordova, AK 99574	424-6000 (fax)	cityclerk@cityofcordova.net	
Cordova Chamber of		P.O. Box 99	424-7260	· · · · ·	
Commerce and Visitors Ce	nter	Cordova, AK 99574	424-7259 (fax)	<u>www.cordovachamber.com</u>	
		P.O. Box 1330	424-3265		
Cordova City School Distric	ct	Cordova, AK 99574	424-3271 (fax)	www.cordovasd.org	
Cordova Electric Cooperat	ive,	P.O. Box 20	424-5527	ununu gamdayaalaatnia sam	
Incorporated		Cordova, AK 99574	424-5527 (fax)	www.cordovaelectric.com	
Cordova Times				www.thecordovatimes.com	
Native Village of Eyak		P.O. Box 1388	424-7738	www.nveyak.com	
		Cordova, AK 99574	424-7739 (fax)		
North Pacific Rim Housing		8300 King Street	562-1444	www.nprha-ak.org/index.htm	
Authority Prince William Sound		Anchorage, AK 99518 P.O. Box 1110	562-1445 424-7511		
Aquaculture Corporation		Cordova, AK 99574	424-7511 424-7514 (fax)	www.pwsac.com	
Prince William Sound		2207 Spenard Road,	, ,		
Economic Development		Suite 207	222-2440	www.pwsedd.org	
District		Anchorage, AK 99503	222-2411 (fax)	<del></del>	
The Fuak Preservation Cou	ıncil	P.O. Box 460	424-5890	www.rodzono.org	
The Eyak Preservation Cou	ITICII	Cordova, AK 99574	424-5891 (fax)	www.redzone.org	
TRANSPORTATION					
	Cord	dova is accessed by plane or	boat. It is linked direct	ly to the North Pacific Ocean shipping	
Accessibility				barge services and State Ferry service	
,				ver Delta to the east. Plans for a highw	/ay
				system have been controversial.	
				te-owned and operated, with a 7,500'	
Airport Facilities		halt runway and 1,900' gravel crosswind runway. The State-owned and City-operated dova Municipal Airport has a 1,840' gravel runway. Float planes land at the Lake Eyak			
		plane base or the boat harbor.			
		Daily scheduled jet flights and air taxis are available. Alaska Airlines; Era Aviation; Cordova Air			
Airline Services	Service; Alaska Wilderness.				
Freight		It receives year-round barge services and State Ferry service.			
	Harl	Harbor facilities include a breakwater, dock, a 500-slip small boat harbor, boat launch, boat			
	haul-out, a ferry terminal, and marine repair services. A proposed deep draft port at Shepa				
Vessel Support:		Point has been funded and is in the final Environmental Impact Statement phase. This will			
		vide access to the mile 13 airport, connected to the deep draft dock with staging for spill			
FACULTIES O LITULTIES	resp	response.			
FACILITIES & UTILITIES	Core	lova Telephone Cooperative	/424 224E\- CCI /424 7	7317\	
Telephone		eless: Copper Valley Wireless			
Wireless and Internet		rnet: Copper Valley Telephor	-	· · · · · · · · · · · · · · · · · · ·	ONS
		perative (424-2345); GCI (424			
TV Stations		S; GCI Cable.		·	COMMUNICATI
Radio Stations	KLAI	M-AM (424-3796); KCHU-FM			≥
Cable Provider	GCI	Cable, Inc.			Σ
Teleconferencing		ka Teleconferencing Networl	_	on Office	8
Electricity	Provided by Cordova Electric Cooperative, Inc.				
Fuel Stamma	Gasoline, diesel, and propane Cordova Electric Co-op (60,000 gals.); U.S. Coast Guard (22,000 gals.)				
Fuel Storage					
Housing	Reluctant Fisherman; Orca Adventure lodge; Cordova Lighthouse Inn; Prince William Motel Cordova utilizes water from Murcheson Falls, Heney Creek dam, Meals Reservoir, the Orca				
Reservoir, and Eyak Lake. The water is treated, but only the Eyak water is filtered. Water storage capacity is 2.1 million gallons. The City operates a piped water and sewer system.					
	Sewage is treated before discharge. Over 90% of homes are fully plumbed. Some homes use				
	individual wells and septic systems. The City wants to design a new wastewater treatment plant.				
				Mile 17. The community participates	
Miscellaneous				Cordova Electric Cooperative operates	
		diesel-powered plants, at Ey	ak and Orca, and the H	umpback Creek Hydro Facility.	
SPILL RESPONSE SUPPORT					

(Contact local officials to determine possibility of using community facilities.)			
Potential Command Posts	None identified		
Potential Staging Areas	A proposed deep draft port at Shepard Point has been funded and is in the final Environmental Impact Statement phase. This will provide access to the mile 13 airport, connected to the deep draft dock with staging for spill response.		
	USCG spill response conex; ADEC spill response conex (see page B-72 for an inventory of spill response assets)		
Local Spill Response Equipment	Cordova has a large stockpile of equipment located in the community. The equipment is stored in a fenced in area on Industry Road behind the Alaska Marine Trucking facility. There is also a large stockpile of barges located near the ferry dock. Wilson Construction (907-424-3452) is responsible for the deployment of this equipment in a crisis response.		

# TATITLEK COMMUNITY PROFILE

#### **Location and Climate**

Tatitlek is located on the northeast shore of Tatitlek Narrows, on the Alaska Mainland in Prince William Sound. It lies 30 miles east of Valdez by sea near Bligh Island, and 30 air miles northwest of Cordova. It lies at approximately 60.86472° North Latitude and -146.67861° West Longitude. (Sec. 32, T0115, R008W, Copper River Meridian.) Tatitlek is located in the Valdez Recording District. Winter temperatures range from 17 to 28; summers average 49 to 63. Annual precipitation includes 28 inches of rain and 150 inches of snowfall.

It is an Alutiiq village first reported in the 1880 U.S. Census as "Tatikhlek," with a population of 73. The present spelling was published in 1910 by the U.S. Geological Survey, who wrote that the village originally stood at the head of Gladhaugh Bay, but was moved to its present site in the shadow of Copper Mountain around 1900. A post office was established in 1946. Many residents of Chenega moved to Tatitlek following its destruction by tsunami after the 1964 Good Friday earthquake. The dominant feature in the village is the blue-domed Russian Orthodox Church. Tatitlek is a coastal Alutiiq village with a fishing- and subsistence-based culture. The sale or importation of alcohol is banned in the village.

# History, Culture, & Demographics

A federally recognized tribe is located in the community -- the Native Village of Tatitlek. The 2010 U.S. Census data showed 60.23% of the population are Alaska Native or part Native. The 2010 U.S. Census data also shows there were 75 total housing units, and 39 were vacant, of which 29 of these units are used only seasonally. The median household income was \$29,464, per capita income was \$17,381 and 17.02% of residents were living below the poverty level. Fish processing and oyster farming provide some employment in Tatitlek. Four residents hold commercial fishing permits. Subsistence activities provide the majority of food items. A coho salmon hatchery at Boulder Bay is nearing completion for subsistence use. A fish and game processing facility is under construction. A small community store has recently opened. Residents of Tatitlek hunt and fish for the following food sources in and around Prince William Sound. Salmon, halibut, deer, waterfowl, seal, sea lions, herring/spawn, bear, oysters/clams,

Subsistence

**Economy** 

octopus and berries. 88 (2010 U.S. Census) Unorganized Unincorporated

Population
Borough Located In
Incorporation Type
Native Entities

Regional: Chugach Alaska Corporation
Profit: Tatitlek Corporation

Nonprofit: Chugachmiut

Village: Native Village of Tatitlek (Federally-recognized Tribe)

EMERGENCY SERVICE	ES Communication of the Commun
Police	None
<b>VPSO</b>	441-5541
State Troopers	None identified
Fire	Serviced through Valdez (835-3734)
Medical	Local hospitals or health clinics include Tatitlek Health Clinic (325-2235). Auxiliary health care is
ivieuicui	provided by Tatitlek EMS (325-2235/2301/2313).

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Chugach Alaska Corporation	3800 Centerpoint Drive, Ste. 700	561-2668 562-5258 (fax)	www.chugach-ak.com	
Chugachmiut	1840 Bragaw Street, Ste. 110 Anchorage, AK 99508	562-4155 563-2891 (fax)	www.chugachmiut.org	
Native Village of	P.O. Box 171	325-2311		
Tatitlek	Tatitlek, AK 99677	325-2298 (fax)		
North Pacific Rim	8300 King Street	562-1444	www.nprha-ak.org/index.htm	
Housing Authority	Anchorage, AK 99518	562-1445 (fax)	www.npma-ak.org/mdex.mm	
PWS Economic	2207 Spenard Road, Suite 207	222-2440	www pweedd org	
Development District	Anchorage, AK 99503	222-2411 (fax)	www.pwsedd.org	

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES			
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL
Tatitlek Electric Utility	P.O. Box 171	325-2311	
ratitiek Electric Othity	Tatitlek, AK 99677	325-2298 (fax)	
The Tatitlek Corporation	561 E 36 <sup>th</sup> Ave	278-4000	www.totitlek.com
	Anchorage, AK 99503	278-4050 (fax)	www.tatitlek.com

TRANSPORTATION	
Accessibility	Tatitlek is accessible by plane (float or wheel) or boat. The Alaska State Ferry stops in the village
7.00000	on request ( <u>www.alaskaferry.com</u> ).
	Tatitlek has a state-owned 3,701-feet long by 75-feet wide lighted gravel airstrip and a seaplane
Airport Facilities	landing area; air charters are available from Valdez and Cordova. Boats are the primary means of local transportation. In 1996, the Alaska Marine Highway began "whistle stop" service.
	There is no regularly scheduled flights in or out of the Village of Tatitlek. Commercial flights are
	available from Anchorage-Valdez-Anchorage on ERA Aviation (248-4422 / www.era-
Airline Services	aviation.com) and then charter to Tatitlek.
	From Anchorage: Alaska Air Transit (276-5422)
	From Cordova: Cordova Air (424-3289)
Freight	None identified
Vessel Support	Dock

<b>FACILITIES &amp; UTILITIES</b>				
Telephone	Copper Valley Telephone Cooperative (835-2231)	COMMUNICATIONS		
Wireless and Internet	ss and Internet GCI (1-800-800-4800)			
TV Stations	ARCS	2		
Radio Stations	KCHU-AM; KVAK-AM	2		
Cable Provider	GCI	≥		
Teleconferencing	Alaska Teleconferencing Network; Valdez Legislative Information Office	9		
Electricity	Provided by Tatitlek Electric Utility.			
Fuel	Gasoline, diesel, and propane.			
Fuel Storage	School (20,000 gals.); Village Council (2 @ 12,000); ADOT (3,000)			
Housing	Village Council apartment			
Water & Sewage	A dam provides water, which is treated and stored in a 170,000-gallon tank. A piped water are sewer system serves all 34 homes. The piped community septic tank system discharges via are ocean outfall. The village has received funds to expand the water storage capacity and treatment due to recent water shortages, and for solid waste improvements.			
Miscellaneous	An oil and hazardous waste recycling center was completed in 1998.			

SPILL RESPONSE SUPPORT (Contact local officials to determine possibility of using community facilities.)				
Potential Command Posts	Youth Teen Center, Tatitlek Community Center			
Potential Staging Areas	None identified			
	USCG spill response conex.			
Local Spill Response Equipment	Emergency response equipment owned by SERVS is located near the deep-water dock in the village (con-x's containing boom, skimmers etc.) The fishing vessel administrator in the community is responsible for deployment of this equipment in a crisis. The fishing vessel administrator lives in the community year around.			

# **VALDEZ COMMUNITY PROFILE**

#### **Location and Climate**

Valdez is located on the north shore of Port Valdez, a deep water fjord in Prince William Sound. It lies 305 road miles east of Anchorage, and 364 road miles south of Fairbanks. It is the southern terminus of the Trans-Alaska oil pipeline. It lies at approximately 61.13083° North Latitude and -146.34833° West Longitude. (Sec. 32, T008S, R006W, Copper River Meridian.) Valdez is located in the Valdez Recording District. January temperatures range from 21° to 30° F; July temperatures are 46° to 61° F. Annual precipitation is 59.3 inches. The average snowfall is, incredibly, 300 inches (25 feet) annually.

The Port of Valdez was named in 1790 by Don Salvador Fidalgo for the celebrated Spanish naval officer Antonio Valdes y Basan. Due to its excellent ice-free port, a town developed in 1898 as a debarkation point for men seeking a route to the Eagle Mining District and the Klondike gold fields. Valdez soon became the supply center of its own gold mining region, and incorporated as a City in 1901. Fort Liscum was established in 1900, and a sled and wagon road was constructed to Fort Egbert in Eagle by the U.S. Army. The Alaska Road Commission further developed the road for automobile travel to Fairbanks; it was completed by the early 1920s. A slide of unstable submerged land during the 1964 earthquake destroyed the original City waterfront, killing several residents. The community was rebuilt on a more stable bedrock foundation 4 miles to the west. During the 1970s, construction of the Trans-Alaska oil pipeline terminal and other cargo transportation facilities brought rapid growth to Valdez. In March 1989, it was the center for the massive oil-spill cleanup after the "Exxon Valdez" disaster. In a few short days, the population of the town tripled. As a result of significant oil taxation revenues, the City offers a variety of quality public services.

History, Culture, & Demographics

The 2010 U.S. Census data showed 8.17% of the population are Alaska Native or part Native. The 2010 U.S. Census data also showed there were 1,763 total housing units, and 190 were vacant, of which 50 of these units are used only seasonally. The median household income was \$80,476, per capita income was \$36,609 and 5.51% of residents were living below the poverty level.

Valdez has one of the highest municipal tax bases in Alaska as the southern terminus and off-loading point of oil extracted from Prudhoe Bay on the North Slope. Four of the top ten employers in Valdez are directly connected to the oil terminus. Alyeska Pipeline Service Co. employs nearly 300 persons. Valdez is a major seaport, with a \$48 million cargo and container facility. City, state, and federal agencies combined provide significant employment. 42 residents hold commercial fishing permits.

Subsistence

**Economy** 

The majority of Valdez residents do not practice the subsistence lifestyle. However, there is a small tribal presence in Valdez that does practice subsistence. Valdez has a healthy sports fishing and recreational fishing industry as well.

Population
Borough Located In
Incorporation Type
Native Entities

3,976 (2010 U.S. Census) Unorganized

Home Rule City

Regional: Chugach Alaska Corporation

Nonprofit: Chugachmiut (Regional); The Valdez Native Tribe (Local)

Police City Police Department (835-4560)
State Troopers State Troopers Post (835-4307)
Fire City Fire Dept./EMS (835-4560); Robe River Fire Hall; Civil Air Patrol

Wedical Valdez Community Hospital (835-2249); Valdez Native Tribe Clinic (835-4951). Auxiliary health care provided by Valdez Fire Dept/EMS (835-4560 x301).

Harbormaster 835-4981

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Chugach Alaska Corporation	3800 Centerpoint Dr., Ste. 700 Anchorage, AK 99503	561-2668 532-5258 (fax)	www.chugach-ak.com	

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Chugachmiut	1840 Bragaw Street, Ste. 110	562-4155	www.chugachmiut.org	
Chagachinat	Anchorage, AK 99508	563-2891 (fax)	www.cnugaciiiiiut.org	
City of Valdez	P.O. Box 307	835-4313	www.ci.valdez.ak.us	
City of values	Valdez, AK 99686	835-2992 (fax)	www.ci.vaiuez.ak.us	
Connecting Ties,	P.O. Box 2017	835-3274	www.connectingties.org	
incorporated	Valdez, AK 99686	835-3512 (fax)	www.comecungues.org	
Copper Valley Electric	P.O. Box 45	822-3211	MANAY CVO2 OF G	
Association, Inc.	Glennallen, AK 99588		www.cvea.org	
PWS Economic	2207 Spenard Road, Ste. 207	222-2440	www.pwcodd.org	
Development District	Anchorage, AK 99503	222-2411 (fax)	www.pwsedd.org	
The Valdez Native	P.O. Box 1108	835-4951	www.chugachmiut.org	
Tribe	Valdez, AK 99686	835-5589 (fax)	www.cnugaciiiiiut.org	
Valdez City School	P.O. Box 398	835-4357	www.edline.net/pages/Valdez City Schools	
District	Valdez, AK 99686	835-4964 (fax)	www.euime.net/pages/valuez_City_schools	
Valdez Convention and	104 Chenega Street	835-4636	www.valdezalaska.org	
Visitors Bureau	Valdez, AK 99686	835-4845 (fax)	info@valdezalaska.org	
Valdoz Star Nowsnanor	P.O. Box 2949	835-2405	www.valdezstar.net	
Valdez Star Newspaper	Valdez, AK 99686	835-3882 (fax)	www.valuezstar.net	

TRANSPORTATION	
Accessibility  The Richardson Highway connects Valdez to Anchorage, Fairbanks and Canada. Port Valdice-free year round and is navigated by hundreds of ocean-going oil cargo vessels each year State Ferry provides transport to Whittier, Cordova, Kodiak, Seward and Homer in the su Cordova only in the winter.	
Airport Facilities	The airport is operated by the state, with a 6,500-foot paved runway, instrument landing system and control tower. A State-owned seaplane base is available at Robe Lake.
Airline Services	Alaska Airlines; Era Aviation; Era Helicopters; Alaska Air Transit (Charter Service)
Freight	Both barges and trucking services deliver cargo to the City.
Vessel Support	Valdez has the largest floating concrete dock in the world, with a 1,200 feet front and water depth exceeding 80 feet. Numerous cargo and container facilities are present in Valdez. A small harbor accommodates 546 commercial fishing boats and recreational vessels. Boat launches and haul-out services are available.

FACILITIES & UTILITIES					
	GCI (1-800-800-4800 / www.gci.com)				
Telephone	Copper Valley Telephone Cooperative (835-2231 or 1-800-478-6612 /				
	vdzcustserv@cvtc.org)				
	GCI (1-800-800-4800 / <u>www.gci.com</u> )				
Wireless and Internet	Copper Valley Telephone Cooperative (835-2231 or 1-800-478-6612 /				
	vdzcustserv@cvtc.org)	COMMUNICATIONS			
TV Stations	None	Š			
Radio Stations	KCHU; KVAK	į			
Cable Provider	GCI	Ź			
Teleconferencing	Alaska Teleconferencing Network; Legislative Information Office	8			
Electricity	Provided by Copper Valley Electric				
Fuel	Gasoline, diesel, and propane.				
Fuel Storage	Unknown				
Housing	Best Western Valdez Harbor Inn, Keystone Hotel, Mountain Sky Hotel, Glacier Sound Inn, Tote Inn	em			
Water & Sewage	Water is derived from four primary wells and is stored in two 750,000-gal. reservoirs prior to piped distribution throughout Valdez. Water storage capacity is 2.24 million gallons. The sewage treatment plant is capable of processing 1.25 million gallons a day. Sewage is deposit in a secondary treatment lagoon. Over 95% of homes are fully plumbed. Many homes use individual wells and septic tanks.	ed			
Miscellaneous	The Class 2 landfill uses a balefill system. An oil and hazardous waste recycling center was completed in 1998.				

#### SPILL RESPONSE SUPPORT

(Contact local officials to determine possibility of using community facilities.)

**Potential Command Posts** 

SERVS Valdez Emergency Operations Center (835-6620); MSO Valdez; Valdez Convention & Civic Center (835-4440); Black Gold Recreation Hall; Valdez Teen Center; Valdez Native Assoc. Bingo Hall; Valdez Senior Citizens Center; Valdez Consortium Library and Valdez Museum; Prince William Sound Community College (834-1600); Valdez High School (835-4767); Valdez Jr. High (835-2244); Valdez Elementary (835-4728)

**Potential Staging Areas** 

State Operated Airport (835-5658); Alaska National Guard Armory (835-2234); Prince William Sound Community College (834-1600); Valdez High School (835-4767); Valdez Jr. High (835-2244); Valdez Elementary (835-4728); State District Court; ADEC Warehouse (835-4698); Harbor (835-4981)

**Local Spill Response Equipment** 

ADEC spill response conex (see page B-72 for an inventory of spill response assets). Valdez is the center for crisis response equipment in Prince William Sound. Alyeska/SERVS (Ship Escort Response Vessel System) has an enormous stockpile of response equipment.

# WHITTIER COMMUNITY PROFILE

#### **Location and Climate**

Whittier is on the northeast shore of the Kenai Peninsula, at the head of Passage Canal. It is on the west side of Prince William Sound, 75 miles southeast of Anchorage. It lies at approximately 60.77306° North Latitude and -148.68389° West Longitude. (Sec. 24, T008N, R004E, Seward Meridian.) Whittier is located in the Anchorage Recording District. Winter temperatures range from 17° to 28° F; summer temperatures average 49° to 63° F. Average annual precipitation includes 66 inches of rain and 80 inches of snowfall.

#### History, Culture, Demographics

Passage Canal was once the quickest route from Prince William Sound to Cook Inlet. Chugach Indians would portage to Turnagain Arm in search of fish. Nearby Whittier Glacier was named for the American poet John Greenleaf Whittier, and was first published in 1915 by the U.S. Coast & Geodetic Survey. A port and railroad terminus were constructed by the U.S. Army for transport of fuel and other supplies into Alaska during World War II. The railroad spur and two tunnels were completed in 1943, and the Whittier Port became the entrance for troops and dependents of the Alaska Command. The huge buildings that dominate Whittier began construction in 1948. The 14-story Hodge Building (now Begich Towers) was built for Army bachelors quarters and family housing, with 198 apartments. The Buckner Building, completed in 1953, had 1,000 apartments and was once the largest building in Alaska. It was called the "city under one roof," with a hospital, bowling alley, theater, gym, swimming pool and shops for Army personnel. Whittier Manor was built in the early 1950s by private developers as rental units for civilian employees. The Port remained an active Army facility until 1960; at that time, the population was 1,200. Whittier Manor was converted to condominiums in 1964; Begich Towers now houses the majority of residents, as the Buckner Building is no longer occupied. The City was incorporated in 1969. Residents enjoy sport-fishing, commercial fishing and subsistence activities.

The 2010 U.S. Census data showed 5.45% of the population are Alaska Native or part Native. The 2010 U.S. Census data also showed there were 280 total housing units, and 166 were vacant, of which 104 of these units are used only seasonally. The median household income was \$46,250, per capita income was \$31,624 and 13.96% of residents were living below the poverty level.

#### **Economy**

Subsistence

The city, school, local services and summer tourism support Whittier. Tours, charters and sport fishing in Prince William Sound attract seasonal visitors. Ten residents hold commercial fishing permits.

Population Borough Located In Incorporation Type A small portion of Whittier residents practice the subsistence lifestyle.

220 (2010 U.S. Census) Unorganized

2<sup>nd</sup> Class City

Native Entities Regional: Chugach Alaska Corporation

Nonprofit: Chugachmiut

#### **EMERGENCY SERVICES**

Police City Police (472-2340)

Fire City Volunteer Fire Department (472-2340); City Fire Hall, City Ambulance

Medical The City of Whittier Medical Clinic (472-2303) is a qualified Emergency Care Center. Auxiliary

health care provided by Whittier Volunteer Ambulance Corps (Clinic 472-2303/472-2340).

Harbormaster 472-2375; Alyeska/SERVS (472-2473)

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Chugach Alaska	3800 Centerpoint Drive, Ste, 700	561-2668	www.chugach-ak.com	
Corporation	Anchorage, AK 99503	562-5258 (fax)		
City of Whittier	P.O. Box 608	472-2327	www.whittieralaska.gov	
	Whittier, AK 99693	472-2404 (fax)	info@whittieralaska.gov	
Eastern Aleutian Tribes,	3380 C Street, Suite 100	277-1440	www.eatribes.org	
Incorporated	Anchorage, AK 99503	277-1446 (fax)	(Native Health Care Provider)	
Greater Whittier	P.O. Box 607	278-2493	www.whittieralaskachamber.org	
Chamber of Commerce	Whittier, AK 99693	278-2491 (fax)		

LOCAL CONTACTS & REGIONAL/STATE ORGANIZATIONS WITH LOCAL OFFICES				
ORGANIZATION	ADDRESS	PHONE	WEBSITE/EMAIL	
Municipality of	6325 West 6 <sup>th</sup> Ave., Suite 250	343-4311	www.muni.org	
Anchorage	Anchorage, AK 99501	343-4313 (fax)	(Landfill Operator)	
PWS Economic	2207 Spenard Road, Suite 207	222-2440	www.pwsedd.org	
Development District	Anchorage, AK 99503	222-2411 (fax)		
TRANSPORTATION				
Accessibility	Whittier is an ice-free port and is accessible by road, rail, ferry, boat and aircraft. To enter Whittier by vehicle, you must pass through the state maintained tunnel and pay a \$12.00 roundtrip toll to enter (1-877-611-2586 / <a href="http://dot.alaska.gov/creg/whittiertunnel/schedule.shtml">http://dot.alaska.gov/creg/whittiertunnel/schedule.shtml</a> ). Whittier has a 1480' by 58' gravel airstrip that accommodates charter aircraft and a city-owned seaplane dock available for passenger transfer.			
Airport Facilities	The State-owned 1,480-foot gravel airstrip accommodates charter aircraft, and a City-owned seaplane dock is available for passenger transfer.			
Airline Services	None			
Freight				
Vessel Support				

FACILITIES & UTILITIES				
Telephone	Local Service: Yukon Telephone (472-2300 / www.yukontel.com)			
	Long Distance: GCI (1-800-800-4800 / www.gci.com)			
Wireless and Internet	GCI (1-800-800-4800 / <u>www.gci.com</u> )	Ĕ		
TV Stations	None	<u>ა</u>		
Radio Stations	KCHU-AM	COMMUNICATIONS		
Cable Provider	Supervisions Cable TV	₹		
Teleconferencing	Alaska Teleconferencing Network; Valdez Legislative Information Office	8		
Electricity	Provided by Chugach Electric Association			
Fuel	Gasoline, diesel, and propane.			
Fuel Storage	Shoreside Petroleum Inc. (48,000 gals.); Department of Defense.			
Housing	June's Whittier B&B Suites, Anchor INN; Sportsman's Inn; Tent/RV Park			
Water & Sewage	Water is derived from wells and a reservoir. Water storage capacity is 1.2 million gallons. entire community is served by a piped water and sewer system, and over 95% of homes are f plumbed. The older portions of the City sewer system need replacement.			
Miscellaneous	Refuse is hauled out by a private contractor to Anchorage - the landfill has been closed. An oil a hazardous waste recycling center was completed in 1998.	and		

SPILL	RESPONSE	SUPPORT
10		

(Contact local officials to determine possibility of using community facilities.)

Potential Command Posts Begich Towers Cullum Room; City Libra

Potential Staging Areas Local Spill Response Equipment Begich Towers Cullum Room; City Library; Whittier Historical & Fine Arts Museum; Whittier Community School

None identified

ADEC spill response conex (see page B-72 for an inventory of spill response assets). SERVS 14 emergency response equipment conexes are located behind Long Dock. Additional emergency response equipment is located near the HarborMaster's office and the USCG maintains equipment in the railroad yard. Shoreside Petroleum has their own cleanup equipment that they manage and maintain. Shoreside provides fuel for the City of Whittier, cruise ships, and fishing vessels in the small boat harbor. The Harbormaster and the Fishing Vessel Administrator are responsible for the deployment of the SERVS equipment in a crisis. Currently both positions are held by the same person.

9240.2 – Fire Departments - TBD

9240.3 – Hazardous Substances Response Teams - TBD

9240.4 – Explosive Ordinance Detachments (EOD) - TBD

9240.5 – Site Safety Personnel/Health Departments - TBD

# 9250 - Private Resources

9250.1 – Clean-up Companies

# 9250.1.1 – Basic Ordering Agreement (BOA)

**Federal Basic Ordering Agreement (BOA) Contractors:** The Coast Guard has authority to access civilian equipment, personnel and services under a Basic Ordering Agreement. The most current civilian contractors list can be found at <a href="http://www.uscg.mil/SILC/emergency.asp">http://www.uscg.mil/SILC/emergency.asp</a>.

<b>BOA Number</b>	Contractor	Address	Phone	POC Email
HSCG84-13-A- J00003	AES Environmental Operations, LLC	3900 C Street, Suite 601, Anchorage, AK 99503	339-5498	Daniel.gallagher@asrcenergy.com
HSCG84-13-A- J00005	Alaska Chadux Corp (COOP)	2347 Azurite Court, Anchorage, AK 99507	348-2238 348-2230 (f)	jallen@chadux.com
HSCG84-13-A- J00007	Alaska Commercial Divers	P.O. Box 9351, Ketchikan, AK 99901	247-0771 617-6199 (c)	alaskacommercialdivers@gmail.com
HSCG84-12-A- J00002	Alaska Marine Response	P.O. Box 1834, Cordova, AK 99574	424-7424	akmarineresponse@gmail.com
DTCG89-02-A- 68F900	Alyeska Pipeline Service	P.O. Box 196606, Anchorage, AK 99519	834-6902 831-1008 (c)	
HSCG84-12-A- J00001	Chemtrack Alaska, Inc.	11711 S. Gambell Street, Anchorage, AK 99515	349-2511	cariie@chemtrak.net
HSCG84-12-A- J00008	Cook Inlet (RCAC)	8195 Kenaii Spur, Kenai, AK 99611	283-7222 283-6102 (f)	munger@circac.org

	versified vers	Dairy Road, Ketchikan, AK 99901	247-3483	diversifieddiving@yahoo.com
	nvironmental emedies, LLC	400 Sawmill Drive, Valdez, AK 99686	225-3131	Environmental_remedies@hotmail.com
68F919 Ma	agone arine ervices, inc.	P.O. Box 920247, Dutch Harbor, AK 99692	581-1400 581-1495 (f)	dan@magonemarine.com
DTCG89-95-A- En <sup>o</sup> 68F972 Co	acific nvironmental orporation ENCO)	6000 A Street, Anchorage, AK 99518	562-5420 562-5426 (f)	
HSCG84-14-A- Sys	ower estems and upplies	6841 N. Tongass Highway, Ketchikan, AK 99901	247-7772 617-3392	andrew@pssak.com
DTCG89-95-A- 68F970	&R Diving	SR Box 20, Valdez, AK 99686	835-4375 835-5465 (f)	rlw@cvalaska.net
DTCG89-95-A- Ala 68F969 Lig	outheast aska ghterage EAL)	22745 Glacier Highway, Juneau, AK 99801	789-4210 789-7325 (f)	seal@alaska.net
DTCG89-99-A- 68F953 Re Or,	outheast aska etroleum esources rganization, c. (SEAPRO)	540 Water Street, Ste 201, Ketchikan, AK 99901	225-7002 247-1117 (f)	
DTCG89-98-A- Tel 68F923 (Se Re	OS Emerg. esponse eam eldovia esponse eam)	P.O. Box 194, Seldovia, AK 99663	234-7400 234-7699 (f)	office@sosrt.org
CONTRACTING OFFICERS for USCG 17 <sup>TH</sup> DISTRICT: ALASKA  Primary Contact (510) 437-3009				
Alternate Contact	(510) 437-30			

Chief of	(757) 639 4114
Contracting	(757) 628-4114
D17 DRAT/MEP:	463-2247
Sector	957-0159/957-1688
ANCHORAGE PO:	957-0159/957-1000

9250.1.2 - Non-BOA - TBD

#### 9250.1.3 – State Term Contractors:

ADEC maintains Term Contracts with several companies and consulting firms for providing needed expertise and assistance during responses to oils spills and hazardous substance releases. These contracts can be activated by the issuance of a Notice To Proceed by the ADEC Contract Manager or the SOSC.

#### 9250.2 - Media

9250.2.1 - Television - TBD

9250.2.2 - Radio - TBD

9250.2.3 – Newspaper - TBD

# 9250.3 – Fire Fighting/Salvage Companies/Divers

9250.3.1 - Salvage Companies/Divers

3230.3.1 341/4490	, ,	Contact Phone		
Company	Location	Number	BOA?	Capabilities
Alaska Divers and Underwater Salvage	Anchorage	694-0515	No	Diving and salvage
Alaska Marine Transport & Salvage	Anchorage	344-7307	No	Salvage
American Marine Corporation	Anchorage	562-5420	No	Diving and salvage
Black Dolphin Divers	Seward	224-3462	No	Dive capability only
Borton Divers	Anchorage	274-1110	No	Dive capability only
C & C Aquatics	Homer	235-2415	No	Diving and salvage
Cordova Dive Salvage & Recovery	Cordova	424-3789	No	Diving and salvage
Global Diving & Salvage, Inc.	Anchorage	563-9060	No	Diving and salvage
Magone Marine (Resolve Marine Group)	Dutch Harbor	359-1400	No	Diving and salvage
Marine Solution Services	Anchorage	344-7000	No	Dive capability only
R & R Diving	Valdez	835-4375	Yes	Diving and salvage
Storm Chasers Marine Services, Inc.	Seward	224-3536	No	Diving and salvage

# 9250.3.2 - Towing Companies

The USCG at Sector Anchorage maintains a list of companies capable of providing marine towing resources. The following is a sample of companies in the Prince William Sound area.

Company	Location	Contact Phone Number
	Anchorage	278-4978
Crowley Marine Services	Valdez	835-4982
	Whittier	472-2308
Mobile Grid Trailers, Inc.	Cordova	424-3146
Wel-Aska Corp.	Valdez	835-2424

# 9250.4 – Fishing Cooperatives and Fleets

The following partial list of fishing fleets/organizations was extracted from the National Fisherman's Directory of Fishermen's Organizations and Pacific States Marine Fisheries Commission websites:

 $\frac{http://www.nationalfisherman.com/magazine-top/fisherman-s-organizations}{http://www.psmfc.org/habitat/alaska.htm}$ 

ORGANIZATION	ADDRESS	PHONE	FAX/EMAIL
Alaska Commercial Fishermen's Memorial in Juneau	P.O. Box 20092 Juneau, AK 99802	463-5566	whyrock@gci.net
Alaska Crab Coalition	3901 Leary Way NW, Suite 6 Seattle, WA 98107	(206) 547-7560	(206) 547-0130
Alaska Fisheries Development Foundation	431 W. 7 <sup>th</sup> Avenue, Suite 106 Anchorage, AK 99501	276-7315	276-7311 jbrowning@afdf.org
Alaska Independent Fishermen's Marketing Association	P.O. Box 60131 Seattle, WA 98160	(206) 542-3930	Aifma1@seanet.com
Alaska Independent Tendermens Association	P.O. Box 431 Petersburg, AK 99833	518-1724	admin@alaskatenders. org
Alaska Draggers Association	P.O. Box 991 Kodiak AK 99615	486-3910	486-6292
Alaska Longline Fishermens Association	P.O. Box 1229 Sitka, AK 99835	747-3400	747-3462 alfa.staff@gmail.com
Alaska Marine Conservation Council	P.O. Box 101145 Anchorage, AK 99510- 1145	277-5357	277-5975 halibut@akmarine.org
Alaska Marine Safety Education Association	2924 Halibut Point Road Sitka, AK 99835	747-3287	747-3259 admin@amsea.org
Alaska Marketing Association	4917 Leary Avenue N.W. Seattle, WA 98107	(206) 784-8948	(206) 784-9813
Alaska Shellfish Growers Association	P.O. Box 1758 Homer, AK 99603		info@alaskashellfish.or g
Alaska Trollers Association	130 Seward St., Suite 205 Juneau, AK 99801	586-9400	586-4473 ata@gci.net
Alaska Whitefish Trawler Association	P.O. Box 991 Kodiak, AK 99615	486-3910	486-6292 alaska@ptialaska.net
American Fisheries Society, Alaska Chapter	P.O. Box 672302 Chugiak, AK 99567		Audra.brase@alaska.go v
At-sea Processors Association	P.O. Box 32817 Juneau, AK 99803	523-0970	523-0798 smadsen@atsea.org
Bering Sea Fishermen's Association	110 W. 15 <sup>th</sup> Avenue Anchorage, AK 99501	279-6519 (888) 927-2732	258-6688 karen.gillis@bsfaak.org

ORGANIZATION	ADDRESS	PHONE	FAX/EMAIL
Bristol Bay Driftnetters	2408 Nob Hill North	(200) 205 4444	(206) 284-1110
Association	Seattle, WA 98109	(206) 285-1111	danfbarr@msn.com
Concerned Area M	35717 Walkabout Road	225 2621	browburk@horizonsat
Fishermen	Homer, AK 99603	235-2631	ellite.comt
Cook Inlet Aquaculture	40610 K-Beach Road	202 5764	283-9433
Association	Kenai, AK 99611	283-5761	info@ciaanet.org
Cordova District	P.O. Box 939	424 2447	424-3430
Fishermen United	Cordova, AK 99574	424-3447	cdfu@ak.net
Dana Can Field and and	5215 Ballard Ave N.W.		(206) 702 5044
Deep Sea Fishermen's	Suite 1	(206) 783-2922	(206) 783-5811
Union of the Pacific	Seattle, WA 98107		dsfu@dsfu.org
Fishing Vessel Owner's	4005 20 <sup>th</sup> Avenue W.	(206) 284 4720	(206) 202 2241
Association	Seattle, WA 98199	(206) 284-4720	(206) 283-3341
Franzor Langlina	2303 W. Commodore		(206) 284-2902
Freezer-Longline	Way 202	(206) 284-2522	flc1@freezerlongine.bi
Coalition	Seattle, WA 98199		<u>Z</u>
	4241 21 <sup>st</sup> Ave. W., Ste		(206) 213-5272
Groundfish Forum	302	(206) 213-5270	loriswanson@seanet.c
	Seattle, WA 98199		<u>om</u>
Halibut Association of	P.O. Box 872	(360) 592-3116	
North America	Deming, WA 98244	(500) 592-5110	
Kenai Peninsula	43961 K-Beach Rd, Ste		262-2989
Fishermen's	F	262-2492	kpfa@alaska.net
Association	Soldotna, AK 99669		kpra@aiaska.net
Kodiak Fishermen's	P.O. Box 467	486-8085	486-8090
Wives & Associates	Kodiak, AK 99615	480-8083	avonkodiak@gci.net
Kodiak Regional	104 Center Ave. Suite		
Aquaculture	205	486-6555	486-4105
Association	Kodiak, AK 99615		
Kodiak Seine Boat	P.O. Box 1035	486-3453	486-8362
Owners Association	Kodiak, AK 99615	400-3433	400-0302
Kvichak Setnetters	P.O. Box 92105	277-0187	naknek@gci.net
Association	Anchorage, AK 99509	277-0107	Hakriek@gci.net
	2211 Alaskan Wy, Pier		(206) 441-6665
Maritime Event Center	66	(206) 441-6666	info@bellharbor.com
	Seattle, WA 98121		into@belindrbor.com
Northern Southeast	1308 Sawmill Creek		747-1470
Regional Aquaculture	Road	747-6850	Ilona mayo@nsraa.org
Association	Sitka, AK 99835		nona_mayo@nsraa.org
North Pacific Fisheries	P.O. Box 796	235-6359	npfahomer@gmail.com
Association	Homer, AK 99603		- Apranomer @ gman.com
North Pacific Fishing	1900 W. Emerson		(206) 286-9332
Vessel Owners'	Suite 101	(206) 285-3383	info@npfvoa.org
Association	Seattle, WA 98119		og hprvou.org
North Pacific Gillnet	2408 Nob Hill North	(206) 285-1111	(206) 284-1110
Alliance	Seattle, WA 98109		<u> </u>
Northwest Fisheries	2208 N.W. Market	(206) 789-6197	(206) 789-8147

ORGANIZATION	ADDRESS	PHONE	FAX/EMAIL
Association	Street		info@northwestfisheri
	Suite 318		es.org
	Seattle, WA 98107		
Northwest Indian	6730 Martin Way E.	(200) 420 4400	(360) 753-8659
Fisheries Commission	Olympia, WA 98516	(360) 438-1180	contact@nwifc.org
Pacific Coast	D.O. Doy 20270		
Federation of	P.O. Box 29370	(415) 561 5000	(415) 561-5464
Fishermen's	San Francisco, CA	(415) 561-5080	zgrader@ifrfish.org
Associations	94129		
Pacific Seafood	1900 W. Emerson		(206) 202 2207
	Place, Suite 205	(206) 281-1667	(206) 283-2387 info@pspafish.net
Processors Association	Seattle, WA 98119		into@pspatisti.net
Pacific Whiting	4039 21st Ave W, Ste		
Conservation	400	(206) 285-5139	
Cooperative	Seattle, WA 98199		
Petersburg Vessel	P.O. Box 232	772-9323	772-9323
Owners Association	Petersburg, AK 99833	772-9525	pvoa@gci.net
Prince William Sound	P.O. Box 1110	424-7511	424-7514
Aquaculture Corp	Cordova, AK 99574	424-7311	pwsac@ak.net
Purse Seiner Vessel	1900 W. Nickerson		(206) 283-7795
Owners Association	Suite 320	(888) 284-7733	info@psvoa.com
Owners Association	Seattle, WA 98119		iiio@psvoa.com
Seafood Producers	2875 Roeder Ave, Ste 2	(360) 733-0120	(360) 733-0513
Cooperative	Bellingham, WA 98225	(300) 733 0120	spc@spcsales.com
Southeast Alaska	9369 North Douglas		523-1168
Fishermen's Alliance	Hwy	586-6652	seafa@gci.net
	Juneau, AK 99801		<u></u>
Southeast Alaska	P.O. Box 23081	463-5030	463-5083
Seiners Association	Juneau, AK 99802		100 0000
Southern Southeast	14 Borch Street		225-1348
Regional Aquaculture	Ketchikan, AK 99901	225-9605	admin@ssraa.org
Association	·		
	4005 20 <sup>th</sup> Avenue W.	()	(206) 282-2414
United Catcher Boats	Suite 116	(206) 282-2599	bpaine@ucba.org
	Seattle, WA 98199		
United Cook Inlet Drift	43961 K-Beach Rd	250 0425	260-9438
Association	Suite 116	260-9436	info@ucida.org
	Soldotna, AK 99669		
United Fishermen of	211 4 <sup>th</sup> Street, Suite	F06 2022	463-2545
Alaska	110	586-2820	ufa@ufa-fish.org
	Juneau, AK 99801		
United Fishermen's	P.O. Box 1035	486-3453	486-8362
Marketing Association	Kodiak, AK 99615		
United Southeast	P.O. Box 20538	586-6550	usag@alaska.gov
Alaska Gillnetters	Juneau, AK 99802		
Valdez Fisheries	P.O. Box 125	835-4874	835-4831
Development	Valdez, AK 99686		

ORGANIZATION	ADDRESS	PHONE	FAX/EMAIL
Association			
Western Fishboat	P.O. Box 992723	(530) 229-1097	(530) 229-0973
Owners Association	Redding, CA 96099	(550) 229-1097	wfoa@charter.net
Women's Maritime Association	1916 Pike Place, #12, PMB 743 Seattle, WA 98101	(206) 441-5678	info@womensmaritim eassoc.com
Yukon River Drainage Fisheries Association	725 Christensen Drive Suite 3-B Anchorage, AK 99501	272-3141	272-3142 info@yukonsalmon.org

# 9250.5 – Volunteer Organizations

<u>Volunteer Organizations</u>				
Normal Process: The Alaska State Troopers will initiate a request for Civil Air Patrol assistance through				
the Rescue Coordination Center	the Rescue Coordination Center (RCC). The RCC will activate the Civil Air Patrol in the appropriate			
region, assign a mission number, and provide approval authority for the mission.				
Agency	Point of Contact Telephone Number			
American Red Cross				
A		277 4520 (\\\)		

1.65.117	· care or contents	
American Red Cross		
Anchorage – Disaster Services,		277-1538 (WK)
State Coordinating Chapter		552-1110 (After Hours)
Bird Treatment &	Dr. lim Coatt	562-4852
Learning Center	Dr. Jim Scott	562-1852
Civil Air Patrol		
*Rescue Coordination Center	National Guard Armory Camp Denali	428-7230
Anchorage	Birchwood Composite Squadron	688-4995
Anchorage	Polaris Composite Squadron	272-7227
Fairbanks		474-0378
Homer		235-8062
Juneau		789-0245
Kenai		283-7801
Seward		224-3000
USCG Auxiliary	17th District (USCG)	463-2000
Juneau Raptor Center		586-8393

# 9250.6 – Maritime Associations/Organizations/Cooperatives

# 9250.**6**.1 - Port Authorities, Harbor Masters, and Marine Pilots

Most current contact information can be found on the Alaska Association of Harbormasters and Port Administrators webpage at: <a href="http://www.alaskaharbors.org/membership">http://www.alaskaharbors.org/membership</a> corporate.html#c

<u>Location</u>	Phone Number
Chenega Bay & Tatitlek	562-1444
Cordova	424-6400
Seward	224-3138
Valdez	835-4564
Whittier	472-2327

#### 9250.6.2 - Marine Pilot Associations

There are three marine pilot associations in Alaska. The State of Alaska Board of Marine Pilots website has additional information at

https://www.commerce.alaska.gov/web/cbpl/ProfessionalLicensing/BoardofMarinePilots.aspx

#### Marine Pilot Associations

Name	Contact Information	Phone	Email/Website
Alaska Marine Pilots, LLC	3705 Arctic Blvd., #107 Anchorage, Alaska 99503	581-1240	amp@ampilots.com
Southwest Alaska Pilots Association	P.O. Box 977 Homer, AK 99603-0977	1725-8782	swpilots@ak.net http://www.swpilots.com
Southeast Alaska Pilots' Association	1621 Tongass Avenue, Suite 300 Ketchikan, AK 99901-6074	225-9696	pilots@seapa.com www.seapa.com

#### 9250.7 – Academic Institutions

ORGANIZATION	ADDRESS	PHONE	FAX	WEBSITE/EMAIL
Alaska Gateway Schools	1313.5 Alaska Highway P.O. Box 226 Tok, AK 99780	883-5151	883-5154	www.agsd.us
Chugach School District (serves Whittier, Chenega, and Tatitlek)	9312 Vanguard Drive Anchorage, AK 99507	522-7400	522-3399	www.chugachsch ools.com
Copper River Schools	1976 Aurora Drive P.O. Box 108 Glennallen, AK 99588	822-3234	822-3949	www.crsd.us
Cordova School District	675 Second Street P.O. Box 1330 Cordova, AK 99574	424-3265	424-3271	www.cordovasd.o
Valdez City Schools	1112 West Klutina Street P.O. Box 398 Valdez, AK 99686	835-4357	835-4964	www.valdezcitysc hools.org

# 9250.8 – Laboratories

**Disclaimer:** In providing this list does not guarantee the accuracy or validity of the data generated by these laboratories. A laboratory that is *certified* or *approved* has established that they have the ability to implement a quality control program in accordance with the appropriate federal or State regulations or statutes. This list is updated every Tuesday by the ADEC Contaminated Sites Lab Approval Officer (907 465-5390). For the most up-to-date listing, visit the following website:

http://dec.alaska.gov/spar/csp/LabApproval/ListOfAprovedLabs.htm

When choosing a lab from the list, request the lab supply a copy of their current ADEC approval letter. These letters detail the methods <u>and matrices</u> for which the lab has approval. "Approved methods" does not imply approval for both water and soil samples. Labs must renew their approval and pass performance evaluation samples annually. Failure to do so results in the revocation of a lab's approval.

#### 9250.9 – Emergency Medical Services

All medical resource information can be found in of this document, or in the Community Profiles.

#### 9250.10 - Weather Resources

The National Weather Service (NWS), which is part of the National Oceanic and Atmospheric Administration (NOAA), can provide current and forecast weather for the marine environment as well as the normal inland/coastal zones. In addition, ice reports and forecasts are available upon request.

General Forecasting 266-5172/5167

Ice Forecast 266-5138 (This is NOT a 24-hr line)

Alaska Aviation Weather Unit 266-5110
Alaska Pacific River Forecast Center 266-5160
Alaska Region Operations Center 271-6540

**Weather Service Offices:** The NWS provides a full service of forecast information, maps and satellite imagery at their website.

NOAA/National Weather Service Internet/Web Pages:

NWS Alaska Region
Anchorage Weather Forecast Office
Alaska Pacific River Forecast Center
Alaska Aviation Weather Unit
Alaska Ice Desk

http://www.arh.noaa.gov/
http://pafc.arh.noaa.gov/
http://aawu.arh.noaa/gov/
http://pafc.arh.noaa.gov/ice.php

The following information was extracted from the Alaska Marine Radio Directory:

**NOAA WEATHER RADIO (NWR)**: NOAA Weather Radio continuous voice broadcasts on 162.40 and 162.55 MHZ can usually be received 20-40 miles from the transmitting antenna site, depending on terrain and the quality of the receiver used. Where transmitting antennas are on high ground, the range is somewhat greater, reaching 60 miles or more. The VHF-FM frequencies used for these broadcasts require narrow-band FM receivers. The National Weather Service recommends receivers having a sensitivity of one microvolt or less and a quieting factor of 20 decibels. Some receivers are equipped with a warning alert device that can be turned on by means of a tone signal controlled by the National Weather Service office concerned. This signal is transmitted for 13 seconds preceding an announcement of a severe weather warning.

# VHF CONTINUOUS COMMERCE WEATHER BROADCASTS (NWR)

<u>Location</u>	<u>Station</u>	Frequency (MHZ)
Cordova	WXJ-79	162.55
Valdez	WXJ-63	162.55

These VHF-FM radio stations are managed by the National Weather Service. Forecasts are issued at scheduled times; broadcast tapes are updated and amended as required. The broadcasts, in general, contain forecasts and warnings for the local area and nearby coastal waters, special severe weather bulletins, tsunami warnings, a description of the weather pattern as it affects Alaska, and weather reports from selected weather stations.

# COMMERCIAL BROADCAST AM AND FM RADIO STATIONS THAT BROADCAST NWS FORECASTS AND WARNINGS

<u>Location</u> <u>Station</u> <u>Frequency (KHz)</u>

Cordova KLAM 1450 Glennallen KCAM 790

#### NATIONAL WEATHER SERVICE OFFICE TELEPHONE NUMBERS

Marine weather forecasts and warnings, when issued, can be obtained by telephone as follows:

# **24 Hours Daily**

Cordova (recorded telephone marine forecasts) .......424-3333

# 9260 – Stakeholders

# **Regional Development:**

ORGANIZATION	ADDRESS	PHONE	FAX	WEBSITE/EMAIL
Copper Valley Development Association, Inc.	P.O. Box 9 Glennallen, AK 99588	822-5001	(888) 256-5569	www.coppervalle y.org
Prince William Sound Economic Development District	2207 Spenard Road Suite 207 Anchorage, AK 99503	222-2440	222-2411	www.pwsedd.org

# **Housing Authorities:**

ORGANIZATION	ADDRESS	PHONE	FAX	WEBSITE/EMAIL
Copper River Basin	P.O. Box 8 Glennallen, AK 99588	822-3633		www.crbrha.org
Regional Housing		1-800-478-	822-3662	info@crbrha.org
Authority		3633		
North Pacific Rim	8300 King Street	562-1444		
Housing Authority	Authority Anchorage, AK 99518	1-888-274-	562-1445	www.nprha.com
(NPRHA)		1444		

# **Regional Health Corporations:**

ORGANIZATION	ADDRESS	PHONE	FAX	WEBSITE/EMAIL
Copper River Native Association (Serves Gulkana, Gakona, Chistochina, Chitina, Copper Center, and Tazlina)	Mile 104 Richardson Hwy, Drawer H Copper Center, AK 99573	822- 5241	822- 8801	www.crnative.org
Mt. Sanford Tribal Consortium (Serves Chistochina, Mentasta Lake, Gakona villages.)	P.O. Box 357 Gakona, AK 99586	822- 5399	822- 5810	www.mstc.org info@mstc.org
Chugachmiut (Serves tribal organizations: Chenega, Native Village of	1840 Bragaw Street Suite 110 Anchorage, AK 99508	562- 4155	563- 2891	www.chugachmiut.org info@chugachmiut.org

Eyak, Nanwalek, Port Graham,		
Qutekcak Native Tribe, Tatilek		
IRA, Valdez Native Tribe.)		

# 9300 – DRAFT INCIDENT ACTION PLAN (IAP) - TBD 9400 – AREA PLANNING DOCUMENTATION

#### 9410 - Discharge and Release History

Numerous opportunities exist for spills to occur on water because of the high volume of vessel traffic and the pervasive natural navigational hazards. Because of the limited road system, spills related to road vehicles are not frequent. Most inland spills occur from home heating oil tanks or at fuel depots.

Prince William Sound supports a wide variety of marine vessel traffic, including everything from the smallest pleasure craft to the crude oil supertankers calling on the Alyeska Marine Terminal in Port Valdez. On the majority of non-crude oil spills, little if any product is recovered due to the rapid dissipation and evaporation of the product (See the explanation on the "Fate of Spilled Oil" below for further information.), the sea and weather conditions, and the often remote locations of the incidents. When response equipment is deployed, it usually involves the deployment of boom to prevent oil from entering sensitive areas or to encircle the source to prevent the spread of oil, and the use of sorbent materials to collect the fuel. Spill responders generally prefer skimmers for collecting spilled products, but they are not always available in a timely manner when responding to spills in remote locations. The cities of Valdez, Cordova, Glennallen, Mentasta and many other small villages are not immune to oil discharges or hazardous material releases. Because these towns witness a remarkable amount of fuel transfers, the opportunity for spills is high.

The most notable spill in Prince William Sound was the T/V Exxon Valdez grounding incident and subsequent spill of 11 million gallons of crude oil in March of 1989. This catastrophic event led to the passing of the Oil Pollution Act of 1990, which greatly improved oil spill response capabilities in the United States and, most markedly, in Prince William Sound.

The following spill history reflects information obtained from the Alaska Department of Environmental Conservation and U.S. Coast Guard records. This partial listing includes only the more significant spills or hazardous material releases. This abbreviated spill history is provided to give an overall view of the vast array of facility and transportation-related accidents that can occur.

For discharge and release historic information, check the ADEC Prevention, Preparedness and Response Database: <a href="http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch">http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch</a>

# 9410.1 - Noteworthy Spills

#### January 3, 1989 T/V Thompson Pass

Location: Berth 4, Valdez Marine Terminal

Product: 60,000 to 75,000 gallons of ANS crude oil

An oily sheen was initially observed in while the vessel was offloading at a southern port. During onloading operations at the Valdez Marine Terminal, crude oil was released through a crack in the hull.

March 24, 1989 T/V Exxon Valdez

Location: Near the mouth of the Valdez Arm, off Bligh I. in Prince William Sound

Product: Nearly 11 million gallons of ANS crude oil

Just after midnight, the supertanker Exxon Valdez, containing more than 53 million gallons of oil, ran aground on the charted rocks of Bligh Reef after exiting the prescribed tanker navigation lanes in an effort to avoid icebergs from nearby Columbia Glacier. The impact ruptured eight of the eleven cargo tanks. Oil spewed out of the tanker in such quantities that, for a while, the slick stood at over two feet thick in places. Within 36 hours after the grounding, and with the weather holding calm, air reconnaissance reported the oil slick to be 10 miles long and 3 to 7 mile wide. Despite calm weather for the first three days, spill response efforts were stymied by confusion, lack of equipment, and misunderstandings over proper response and control. A major storm, boasting winds up to 73mph, blasted through the Sound on Sunday night, March 26, spreading oil in all directions and coating the first of many miles of shoreline. Eventually, over 1200 miles of coastline would be impacted by oil, including the outer Kenai coast and islands, reaching the mouth of Kachemak Bay, and out to Kodiak Island and the Alaskan Peninsula. Exxon mounted a major shoreline cleanup effort during the summer of 1989, and similar but much reduced cleanup activities during the summers of 1990 and 1991. Recent studies report various parts of the coastal ecosystem still exhibiting negative effects from the oil spill.

# April 20, 1996 TAPS Check Valve 92

Location: Alyeska Pipeline MP 593.7, at check valve 92, about 7 miles south of Pump Station 10.

Product: 34,073 gallons of ANS Crude Oil

The leak was caused by a leak in the by-pass valve threadlet. Alyeska discovered crude oil in two metal culvert access pipes about 60 feet north of check valve 92. About 16 inches of crude (about 100 gallons) was pumped from the pipes. Oil seeped into the pipes at a rate of about 6 - 8 gallons per hour. Alyeska reduced the pipeline throughput from 1.5 million barrels per day to 700,000 barrels per day, and pumped crude oil from the storage tanks at PS 10 to make storage available in case the line needs to be evacuated for repairs. An Incident Management Team was activated and based at Pump Station 10. Four task forces were organized to address the spill. Task force 1 excavated in the area around check valve 92. Task force 2 excavated near the metal culvert pipes and located the leading edge of the spill. Task force 3 established a contaminated soil stockpile and Task Force 4 provided decon. DEC and Joint Pipeline Office staff responded and monitored initial and follow-on response actions and reviewed cleanup plans.

#### August 4, 2001 F/V Windy Bay

Location: Olsen Rock, east of Olsen Island, northern Prince William Sound

Product: 35,000 gallons of diesel

The F/V Windy Bay ran aground at 10:45 am and sank at 1:56 pm in about 1000 feet of water. The vessel contained 35,000 gallons of diesel fuel at the time of sinking. The vessel also carried 100 gallons lube oil and 300-500 gallons hydraulic fluid. An on scene responder estimated the daily release rate at about 60 gallons fuel a day. Because of the great depth for the boom anchoring systems, oversized anchors and buoys were mobilized. The Coast Guard, Dec, Alaska Chadux and SERVS responded to the incident. Containment boom was deployed to protect identified sensitive areas. The open-water recovery operations applied two Current Buster systems. Wildlife in the area included numerous seabirds, bald eagles, sea otters, sea lions, and humpback whales. Seven dead oiled birds were recovered (6 Marbled Murrelets and 1 Scoter). USF&WS otter specialists demobilized after observing that sixty otters in the area exhibited normal behavior and did not appear to have suffered any impacts. One SCAT team assessed shorelines for oil-impacts. Approximately 5.7 miles of shoreline were surveyed. Beach cleanup crews worked on Little Fairmont and Little Olsen Island. Natural flushing supplemented with low-pressure water spray was used on the oiled shoreline at these locations.

August 18, 2003 F/V Valiant Maid

Location: Spike Island, Cordova, Prince William Sound

<u>Product:</u> 700 gallons of diesel fuel, and several gallons of engine oil

The 42 gross ton wooden vessel hit a rock, split apart and sank in 45' of water. The contents of the vessel's fuel tanks were released. The vessel was rolled to its starboard side on August 20, 2003 and divers installed a flange on the port side tank just after slack tide. After pumping only sea water from the port tank, and upon investigation by the divers, it was determined that only residual fuel remained on board the vessel. Containment boom was deployed around the vesse, I and small amounts of sheen were seen inside the boom, which remained in place through the recovery of the vessel. A wildlife survey around Pike Island revealed no stressed wildlife. The spill did affect the marine waters and rock shores of the nearby island.

#### January 11, 2007 Big State Logistics

Location: Mile Post 81, Richardson Highway, Squirrel Creek Hill

Product: 750 gallons of diesel fuel

A tractor trailer transporting 14,000 gallons of diesel fuel northbound from Valdez to Fairbanks jack-knifed while attempting to travel up Squirrel Creek Hill. During the accident the manifold for the pup-tank was damaged, releasing approximately 750 gallons of diesel fuel onto the frozen road surface. The spill was contained to the roadway and pooled liquids recovered with sorbent materials. Big State Logistics worked with the State of Alaska Department of Transportation to scrape the ice-compacted road surface to recover any additional fuel-contaminated ice and snow, which was transported from the site for appropriate disposal. Responders pumped fuel from the pup-tank into another tractor trailer that was mobilized from Valdez. Other than the immediate impact to the Richardson Highway, no other resources, including wildlife, were affected.

# December 28, 2008 Petro Star Refinery Fire

Location: Mile 2.5 Dayville Road, Valdez

<u>Product:</u> 200 gallons of ANS crude oil; 5,000-8,000 gallons of water contaminated with oil; 100 gallons of

propylene glycol

A fire in the refractory tower at the refinery caused the discharge. The Petro Star Fire Team, the Valdez Fire Department, and the Alyeska Marine Terminal Fire Team combined to extinguish the fire at 12:40 A.M. on December 29, 2008. The entire process area was isolated from energy sources, and a work plan was developed to safely remove all of the remaining hydrocarbons in the system. Following that, workers began dismantling the plant and preparing it for rebuilding. The Alaska Chadux Corporation response crew employed an excavator and a loader to scrape up the firewater ice that was contaminated with crude oil, glycol, and aqueous firefighting foam (AFFF). A large snow melter melted the contaminated ice for decanting to collect the oil, which was hauled to the Valdez Wastewater Treatment Plant for final treatment. Very strong winds scoured the site and downwind snow areas, and a location was found where firewater appeared to have escaped the perimeter dike at a drain. However, testing indicated the oil content was minimal and within regulatory limits.

# December 23, 2009 Tug Pathfinder

Location: Bligh Reef, Prince William Sound

Product: 6,410 gallons of diesel fuel

The 136-foot tug had completed an ice survey and was headed back to Port Valdez at the time of the grounding. The grounding caused extensive damage to the hull, tearing a 4 to 5 foot hole at the keel. Crowley Maritime Corporation (the responsible party) completed an assessment of the volume of diesel fuel released from the tug; a third party consultant measured all fuel recovered from the tug. Crowley

estimated 6,410 gallons of fuel released into the environment. The marine waters of Prince William Sound were affected by the spill, but no oiled wildlife nor shoreline impacts were reported.

# August 11, 2013 F/V Fate Hunter

<u>Location:</u> Approximately 7 miles west of Valdez, and less than one mile from Shoup Bay in Port Valdez Product: 1,500 gallons of diesel fuel, 300 gallons of hydraulic oil and 100 gallons of lube oil

The 65-foot steel-hulled fishing tender was returning to Valdez, after taking 150,000 pounds of salmon on board, when it ran aground. Responders secured the vessel to shore with lines and surrounded it with containment and sorbent boom. When the vessel orientation shifted during recovery operations, small bubbles of oil were occasionally released, causing a light sheen, which was collected by sorbent material. No sheen was observed outside the boom. Based on dive surveys, Alaska Chadux and Global Diving and Salvage determined the safest option for removing the fuel and hydraulic/lube oils was to conduct lightering operations while the vessel remained at its current location. Lightering removed nearly 1300 gallons of fuel from the vessel. Alaska Marine Response conducted vessel recovery operations. The vessel, heavily loaded with fish, sat precariously on a ledge, threatening to slide into deeper water. A large 6-inch diameter diesel-powered macerating trash pump successfully pumped approximately 150,000 pounds of pink salmon from the hold of the vessel, creating a pink slurry that was discharged deep underwater just offshore from the recovery operations. While fish were being removed from the vessel, the fish hold hatch covers were modified to provide an air tight seal so water could be pumped out of the holds and air pumped into them in order to provide additional lift to the vessel. F/V Fate Hunter salvage operations were successful, and the vessel refloated and towed to Cordova. There were no reported impacts to wildlife.

#### 9410.2 - Prince William Sound Area Oil Spill Data 1995-2005

In 2007, ADEC staff completed and published the report "Ten Year Statewide Summary of Oil and Hazardous Substance Spill Data." This spill data analysis report provides findings related to spills reported to ADEC for the 10-year period extending from July 1, 1995 to June 30, 2005 [State Fiscal Year (FY) 1996-2005]. A 'static' data set was established, which allowed staff to carefully review and QA/QC data. The report covered the entire State and outlined the results for each of the ten areas.

The data for the Prince William Sound Area presented some discernible trends:

- The average number of spills per year in the Prince William Sound Area have been on a general decline since Fiscal Year (FY) 1998. The large volume spilled in FY2002 is the result of the F/V Windy Bay spill on August 4, 2001; the vessel sank, releasing approximately 35,000 gallons of diesel into the marine waters of PWS. There were several other large spills, including the Valdez Petroleum Terminal (a spill of 3,065 gallons of diesel on February 13, 2002) and the F/V Vanguard spill (2,000 gallons of diesel to marine waters on July 26, 2001). These three spills accounted for approximately 87% of the total volume for FY2002.
- The same seasonal trend seems to apply for the Prince William Sound area. The number of spills
  appears to roughly reflect the fishing season (in this case, June thru August), with a lesser number
  of spills occurring during the October thru January-February timeframe.
- The number of spills greater than 1,000 gallons has been reduced significantly since FY2002.
- The number of spills by facility type was fairly evenly distributed between Storage (35%), Vessels (27%), Transportation (25%), and Other (13%). Transportation facilities (30%) had a slight edge over Vessels (29%) and Storage (27%) in terms of the total volume released by facility type.
- Structural/Mechanical problems were the primary cause of 54% of the spills, followed by Human Factors at 23%. In terms of total volume by cause, Human Factors (49%) and Structural/Mechanical causes (44%) accounted for 93% of the total volume released.

• The vast majority (78%) of the spills involved noncrude oil. Noncrude oil spills also accounted for 63% of the total volume released.

#### 9420 - Risk Assessment For Prince William Sound Area

Each of the shoreside communities and remote settlements in the Prince William Sound Area faces the risk of oil or hazardous materials pollution from vessel traffic or from any local shoreside facilities. Considerable vessel traffic transits the waters of the Sound, ranging from small fishing and recreational vessels to fuel and freight barges and crude oil tankers.

Those communities on the road system in the area face threats from hazmat transportation mishaps.

To address spills in this subarctic-maritime climatic zone requires careful preplanning to overcome the effects imposed by the moist, cold-weather environment. Machinery and people can face significant challenges; the severe stresses imposed by winter conditions, with extreme temperatures and the extended darkness, can seriously reduce individual efficiency over a given period.

The summer months expose many species, both in diversity and numbers, to the negative effects of petroleum spills, especially land based spills. In the event of spilled product on land during winter months, snow and ice may buffer the flora and fauna as well as keep the oil from entering a watershed. Negative effects are just as serious in the winter months for ocean spills as they are during the summer. Twice daily high/low tides keep the vast majority of the tidal shorelines open to potential exposure to spilled oil. Winter snows drive many land mammals (Sitka black-tailed deer, ermine, river otter, mink, coyote) to spend more time on the shoreline in the winter than in the summer. In turn, exposure to ocean-spilled oil potentially increases in winter for land mammals. Certain local wildlife populations are at particular risk if exposed to oil (e.g., sea otters, puffins) due to oil's effect on fur and feathers.

A number of species leave the region, many stay, while still others move into the area to spend the winter. Harbor seals, Steller sea lions, orcas, sea otters and Dall's porpoise all stay in the winter with comparable numbers to the summer, although distribution varies. Humpback whale numbers take a dip in late August but increase from late September through January. Some of the highest numbers of humpback whales occur in November and December, with the lowest numbers in February.

Bird rookeries empty out during the winter months but many birds stay the winter. Bald eagles migrate from the interior to join resident eagles, as do all 4 species of loon. Flocks of over 200 Pacific loons are often seen in the winter. Common murres leave their rookeries but stay in scattered, offshore groups. Other birds that spend the winter include marbled murrelets, pigeon guillemots, cormorants, scoters and some gulls. Nearshore ducks are also common in the winter months and include harlequins, grebes, mergansers and goldeneyes. Some shorebirds like great blue herons and rock sandpipers even stay the winter, and black oystercatchers can be seen congregating on the shoreline in groups of over 50 individuals.

Forage fish (juvenile pacific herring, sand lance, capelin, juvenile cod to name a few) school close to shore and in small bays in the winter. Many small bays, especially northern bays and glacier fiords, develop winter sheet ice. Ice could hold spilled oil back from impacting the shoreline or the oil could get entrained under the ice and be difficult to recover. However, sheet ice is variable and often short-lived.

PWS RISK ASSESSMENT MAPS: Prince William Sound Risk Assessment Maps were prepared as part of the risk assessment process during the development of the Potential Places of Refuge Section of this plan. All

risk assessment maps have been relocated in "Change 3" to the Potential Places of Refuge Section of this plan.

#### <u>9430 – Planning Assumptions - Background Information - TBD</u>

## 9440 - Planning Scenarios

**9440.1** - Coastal Oil Spill Scenarios *9440.1.1* - *Worst Case* 

**Event Description:** A 265,000 DWT tanker experiences a steering failure. Due to heavy weather, the escort vessels were unable to attach a towing line or control the movements of the vessel. The tanker goes aground on the eastern tip of Naked Island. Over the next five days, the vessel breaks apart on the rocks causing a total loss of fuel and cargo into Prince William Sound.

**Location:** Latitude 60 39.6'N, Longitude 147 8.5'W. Naked Island is 6.5 miles to the wst of the Traffic Separation Scheme.

**Spill:** 92.4 million gallons of Alaska North Slope Crude (ANSC), and approximately over 500,000 gallons of bunker C fuel oil. This is a TAPS trade vessel that loaded cargo at the Alyeska Marine Terminal in Valdez.

**Cargo Salvage:** Over a five-day period the hull was totally compromised with the entire contents released. Spill response and salvage options were negated by on-scene weather conditions. Lightering barges will be used when conditions permit for removal of residual cargo and fuel. Boom will also be deployed around the vessel when weather conditions permit.

Time of Year: November

On-Scene Weather: NE winds at 40 knots. Sea state 10-15 feet. Air temperature - 38° F.

**Discussion:** The Captain of the Port, Prince William Sound has set operational restrictions on TAPS trade vessels transiting PWS. Under Federal Regulations 33 CFR 165.1704 vessels transiting in the VTS Special Area are limited to a speed of 12 knots except between Middle Rock and Potato Point where the speed limit shall be 6 knots for laden vessels. A Vessel Escort Response Plan (VERP) developed by the shippers has been accepted by the Coast Guard as meeting the federal regulations for escort vessel selection and informing the master of the performance capabilities as set forth in 33 CFR 168. Under the VERP, tanker speeds have been further defined within the VTS Special Area. Laden vessels are restricted to 6 knots in the Valdez Narrows, 10 knots in the Valdez Arm, 8 knots between Rocky Point and Buoy #9, and 12 knots in the Central Sound. When under ice escort, the vessel speeds are limited to "safe speed" in accordance with Section 7 of the VERP, Revision 1 (2004). Weather restrictions for laden tankers in the Valdez Narrows are winds equal to or greater than 20 knots for 150,000 DWT vessels and 30 knots for all others. Weather restrictions for laden tankers at Hinchinbrook Entrance are winds equal to or greater than 45 knots and/or seas of 15 feet or greater.

The State of Alaska requires that an Escort Vessel and Response Tug escort each laden tanker from the Alyeska Marine Terminal through Hinchinbrook Entrance. The Ship Escort/Response Vessel System (SERVS) also restricts tanker transits if the winds are equal to or greater than 40 knots in Prince William Sound. The maximum transit speed is 10 knots throughout Prince William Sound, except for the Valdez Narrows where the maximum speed is 5 knots. Lower speed limits may be requested by the tanker or

escort vessels when ice is detected in the traffic lane.

The Oil Pollution Act of 1990 (OPA 90) requires oil spill response equipment to be pre-positioned throughout Prince William Sound. For additional information refer to 33 CFR Part 155 Subpart E. SERVS provides this equipment and responds to oil spills involving TAPS trade tankers. Major response equipment including fully equipped response barges and Emergency Response Vessels are located at Cape Hinchinbrook, Naked Island, and Port Valdez. A spill of this magnitude would warrant the activation of the Spills of National Significance (SONS) organization. Refer to the RCP for a description of the SONS organization. Additionally, a spill of this magnitude could also result in a Presidential and gubernatorial disaster declaration.

# Initial Action Description:

- Initial call taken by Vessel Traffic Center (VTC), the **Notification of a Spill Incident** form is completed
- Immediate notification of Captain of the Port, Prince William Sound, and the necessary federal/state/local agency notifications are made based on the Emergency Notification List
- State Type 1 Spill Response Team activated. ADEC Type 1 Plan for PWS implemented along with the AIMS Guide.
- Determine if the spill response is categorically excluded under the national programmatic agreement to protect historic properties, and if not, activate an FOSC Historic Properties Specialist.
- Begin consultation with NMFS on threatened and endangered species and their critical habitats.

#### Weather permitting; the following actions will also occur:

- Immediate call-out of all SERVS response equipment to the site of the discharge. Emergency
  response vessel with additional response barge obtained with the tug from its mooring station
  near Naked Island and on scene within an hour.
- Request immediate air support from Air Station Kodiak, AK to conduct overflights pending evacuation of crew. Coast Guard Cutter (CGC) SYCAMORE, out of Cordova, requested to provide initial on-scene platform.
- Incident Command System activated, and Unified Command formed. Command Post established at Valdez Emergency Operations Center (VEOC).
- The RCP and PWS Area Contingency Plan are activated. The Geographic Response Strategies in the downstream trajectory are reviewed and resource requirements assessed.
- Commence activation of personnel movement.
- COTP closes Traffic Separation Scheme to all vessels and established Safety Zone around vessel.

- Coast Guard declares the incident a Spill of National Significance. ADEC activates the Crisis Management Team.
- USCG drafts POLREP One. ADEC drafts and releases initial SITREP.
- USCG issues Letter of Federal Interest. ADEC issues Notice of State Interest in a Pollution Incident.
- Issue Letter of Designation.
- Withhold Customs Clearance pending receipt of surety bond, or letter of undertaking.
- State of Alaska alerts response action contractors for possible activation.

Initial On-Scene Investigation/Inspection Evaluation and Recommendations:

- Develop information from overflights, crew reports, spill size, utilize video recording as much as possible to document scene and develop initial response strategy.
- Have investigation team immediately conduct drug testing of the vessel's crew and conduct interviews to determine cause.
- Determine cargo and fuel capacities.
- Collect charts and log books for evidence.
- Determine cargo salvage options and lightering potential.

## **Initial Response Actions:**

- Ascertain the personnel safety hazards.
- Activate response structure including the Alaska RRT, DRG, DRAT, PIAT, MLCPAC contracting team, NPFC team, National Strike Force, Spill of National Significance Team, Regional Stakeholder Committee (RSC), State of Alaska Type 1 Spill Response Team, and State Crisis Management Team.
- Contact FAA to restrict air space.
- Prepare initial press release.
- Request local government support and input through the RSC.
- Complete dispersant checklist and consider use of dispersants through direct consultation with the ARRT.
- Complete in situ burning checklist and consult with ARRT for potential use.
- Conduct overflights of spill, prepare spill trajectory and obtain weather forecasts.

- Review Geographic Response Strategies for the immediate area and downstream spill trajectory areas.
- Consult with natural resource trustees on the protection of sensitive areas and resources and on potential response options.
- If threatened or endangered species or their critical habitat areas are present, continue consultation with NMFS representatives in accordance with the Oil Spill Response section of the ESA MOA.

# Containment Countermeasures and Cleanup Strategies:

- The Unified Command will coordinate and develop an Incident Action Plan to:
- Conduct initial containment.
- Protect sensitive areas with deflection boom
- Deploy recovery equipment as weather permits.
- Coordinate response and field-related natural resource damage assessment activities with the natural resource trustee Natural Resource Damage Assessment Liaison.
- Establish staging areas.
- Arrange for proper transportation, communications, and vessel and ground support.
- Arrange for proper waste disposal (decanting, segregation, liquid and solid waste) and acquire required permits.
- Initiate migratory bird and sea otter capture and rehabilitation program.
- Deploy Shoreline Cleanup Assessment Teams.
- Continue working with NMFS representatives on appropriate actions to be taken in accordance with the ESA MOA.

# **Resource Requirements:**

• Quick deployment of high volume oil recovery vessels and other mechanical collection equipment is essential to the successful response and spill damage mitigation. Obviously a spill of this size would require all area response equipment in a joint coordinated cleanup effort. SERVS is the primary responder for TAPS trade vessels in Prince William Sound (for complete lists of their equipment refer to the Prince William Sound Tanker Spill Prevention and Response Plan). Cook Inlet Spill Prevention and Response, Incorporated (CISPRI), Chadux and ACS are the secondary responders in Prince William Sound. All responders have highly organized coordinated management teams knowledgeable in the ICS structure and area familiarity. A communications network is already in place and ready for immediate usage.

- The magnitude of this spill would cause it to transcend beyond the Prince William Sound area. Similar to the 1989 Exxon Valdez oil spill, predominant ocean currents and weather conditions would move the oil towards the southwest, threatening the Kenai Peninsula, Kodiak and surrounding areas. CISPRI resources would more than likely be committed to cleanup and shoreline protection operations in their area of operation (primarily Cook Inlet). A response barge is available at Seldovia for nearshore collection of product. The Captain of the Port, Western Alaska would likewise be heavily involved in overseeing product recovery and cleanup operations in his/her area of operation.
- Personnel: Initial personnel activation may take some time. This area, unlike much of the country,
  does however have a substantial cadre of Hazwoper-trained individuals to man cleanup vessels
  and a large contingent of Hazwoper-trained crews to man fishing vessels for spill response. SERVS
  has spent considerable time in training fishing vessel crews and primary response personnel
  during Hazwoper training and field deployment exercises.

# 9440.1.2 - Maximum Most Probable Case

The maximum most probable case is determined by the largest recorded oil spill to date in Prince William Sound. The largest to date was the Exxon Valdez. Due to the large size of this spill, the response actions for the maximum most probable and the worst case scenarios will not differ.

# 9440.1.3 - Average Most Probable Case

**Introduction:** The AMP case(s) for the PWS area likely would be <u>either</u> a "spill due to transfer operations failure" or a "spill due to a fishing vessel sinking, grounding, or other." Several of the response actions outlined in the worst case scenario would remain the same. Representatives of the USCG and ADEC will likely coordinate cleanup efforts onsite. The need for out-of-region response equipment, the activation of a UC or a JIC, and the deployment of federal and state resources are unlikely in this scenario. Notifications would remain the same to keep all concerned stakeholders and resource agencies informed of the incident.

**NOTE:** The two scenarios are described below; followed by the "Scope of Activities" (shown once since applies to both – realize that of course these are strictly examples/guides to handling an AMP case; as no two scenarios are the same. Thus, the response should be individualized to the specific incident at hand.

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AMP Case Scenario # 1 (Transfer Hose Failure):

**Event Description:** While transferring product at the Valdez Petroleum Terminal (VPT) to a tank barge, the cargo transfer hose fails, causing a loss of product. The spill is not immediately detected. Cargo shutdown is initiated after the spill is detected.

**Location:** Latitude 61-07.5 N, Longitude 14621.0 W. VPT is located on the northeast side of Port Valdez just east of the Valdez City Dock.

Spill: 1050 gallons of diesel fuel. Diesel contained by pre-deployed boom around vessel.

Cargo Salvage: There is no damage to the barge. The transfer hose is removed for inspection by USCG

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and ADEC investigators. Cargo transfer operations will resume pending satisfactory cleanup and satisfactory testing of newly installed transfer hose.

Time of Year: June

**On-Scene Weather:** SW winds at 10 knots, sea state 1-2 feet, air temperature 60 F.

**Discussion:** The Captain of the Port, Prince William Sound requires pre-booming of all vessels transferring at the Valdez Container Terminal and the Alyeska Marine Terminal. The VPT voluntarily pre-booms all vessels transferring at its facility.

OPA 90 requires all facilities to have and maintain or contract for response equipment to respond to their worst case discharge. For more information on this requirement refer to 33 CFR Part 154.

AMP Case Scenario # 2 (Commercial Fishing Vessel Grounding/Sinking):

Event Description: This example is based from an actual case. A 65-foot steel hulled fishing tender returning to Cordova, after taking 150,000 pounds of salmon on board, when it ran aground. Initially the vessel was secured to the shore with lines and was surrounded by containment and sorbent boom. However, when the vessel orientation shifted during recovery operations, small bubbles of oil were occasionally released causing a light sheen which was collected by sorbent material. No sheen was observed outside the boom. Dive surveys were conducted to assess the condition of the vessel, along with the ocean bottom on which the vessel rests. Based on these surveys, the OSRO/Salvage agencies contracted by the RP determined the safest option for removing the fuel was to conduct lightering operations; while the vessel remained at its current location.

**Location**: Northeast point of Spike Island, right outside Cordova Harbor.

Spill: Approximately 605 gallons of fuel was spilled or unaccounted for. Vessel had approximately 1,500 gallons of diesel fuel, 300 gallons of hydraulic oil and 100 gallons of lube oil on board. Lightering operations were conducted, which removed an estimated 1,295 gallons of fuel / oil product off vessel.

Cargo Salvage: The recovery operations were complicated because the vessel is sitting on rocky ledge and the heavy load of fish on board was causing the vessel to slide toward deeper water. On Sep 1, a large 60inch diameter diesel powered macerating trash pump successfully pumped approximately 75,000 lbs of pink salmon form the hold of the vessel. Another 75,000 lbs of pink salmon were removed on Sep 2<sup>nd</sup>. The large macerating pump produced a pink slurry that was discharged deep underwater just offshore from the recovery operations. While fish were being removed from the vessel, the fish hold hatch covers were modified to provide additional lift to the vessel. Salvage operations were successful and vessel was refloated and then towed into Cordova.

**Time of Year**: August – September

**On-Scene Weather**: Variable sea state, winds, temperatures, and visibility (through-out response)

**Vessel Particulars:** 

Vessel Service: Commercial Fishing Vessel

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Length / Weight: 65.5-foot / 104 GRT Stats: Built - 1970, Self-propelled, Hull-Steel

U.S. Documented: Yes (Valid)

**Sensitive Areas at Risk**: The area of incident is a favorite local halibut hole. Impacts would be to fishing, sea otters, aesthetics, birds, Ferry System and Vessel traffic in Cordova Harbor area and be of high visibility (media concern). There were no reported impacts to wildlife.

# Scope of Activities:

# 1. Notification

• Initial call taken by USCG Vessel Traffic Center /completion of Spill Incident Form

- Immediate notification of CG duty personnel and COTP-PWS
- CG duty personnel makes the necessary notifications (Federal, State, Local, etc.) based on the Emergency Notification List (See Response Section, Part One)

# 2. Response\_Activation

- FOSC/SOSC/RP Representatives establish direct communications
- Ensure that responsible party (RP) is notified and willing / able to respond
- Ensure health and safety of all responders (appropriate PPE worn, etc.)
- USCG duty personnel along with ADEC personnel dispatched to the scene at the first opportunity; to investigate cause, determine what response actions have occurred or are underway
- Establish Safety Zone around spill area, and issue Broadcast Notice to Mariners
- Evaluate slick size, direction, area of coverage, proximity to shore, wildlife impacts, wildlife observed in area, on-scene weather, etc.
- Ascertain if aerial over-flights are warranted
- USCG issue Notice of Federal Interest and ADEC issue Notice of State Interest to RP
- Consult with affected natural resource trustees on resources at risk and proposed response actions that may affect trust resources, including consultation on wildlife response and threatened and endangered species and their critical habitats.
- Determine if the spill response is categorically excluded under the national programmatic agreement to protect historic properties, and if not, activate an FOSC's Historic Properties Specialist.
- If threatened or endangered species or their critical habitats are present, continue consultation with NMFS representatives in accordance with the Oil Spill Response section of the ESA MOA.
- Draft POLREP (USCG) and SITREP (ADEC) and distribute accordingly
- Consider consulting with PIO for press release; if warranted

# 3. Initiate Response Actions

- Ascertain the personnel safety hazards and evacuate personnel, if required
- Activate the response structure to the level deemed necessary
- Determine proper cleanup being conducted by RP
- Evaluate the capability of RP to carry out an appropriate response given the situation, for securing

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the source, and preparation of a Site Safety Plan

- Determine feasibility of removal actions based on:
- Will removal actions cause more damage to the environment than allowing the pollutant to naturally dissipate?
- Can cleanup be initiated before the pollutant disperses, making cleanup impractical?
  - o Can equipment be deployed without excessive risk to the life and health of personnel?

# 4. Spill Response Organization

Establish command structure as described in RCP. Include FOSC / SOSC / RP representatives. The
group will always strive to reach consensus decisions. Only when the group has reached an
impasse and the timeliness of the situation requires action will the FOSC make unilateral
decisions.

# 5. Containment, Countermeasures, and Cleanup Strategies

- Secure or isolate the source of spill
- Initiate containment and recovery of spilled material
- Consider double booming of initial containment
- Consider protecting sensitive areas with boom in coordination with resource agencies
- Deployment of recovery equipment supplied by RP or contractor
- Arrange for communications and transportation
- Initiate spill tracking
- Arrange for proper waste disposal and cleanup termination

# 6. Resource Availability and Resource Procurement

No problems anticipated. Resources on hand expected to be adequate. Procuring the resources identified in this spill response is the RP's responsibility. A spill of this volume would not unduly burden the RP since the necessary resources to respond to this spill should be on hand / or contracted out.

# 7. Shortfalls

- **Equipment / Personnel**: No shortfall anticipated.
- **Funding**: Funds availability and access should pose no problem regardless of the financial capabilities of the RP. If funding problems arise, the FOSC has access to the OSLTF and procedures are in place to make these funds available (if the RP is not handling the situation adequately, etc.). Also, the USCG may facilitate opening the fund to be used for the issuing of orders for folks like the Strike Team, DRAT, aerial over-flights, or transport of CG personnel to remote areas, etc.
- **Minimum Response Times**: Response should be initiated immediately, unless due to extreme weather conditions, etc.

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## 9440.2 - HAZMAT scenarios

9440.2.1 - Coastal Scenario: Worst Case

**Event Description:** Due to the lack of vessel traffic transporting Hazardous Materials within the PWS AOR; the scenario describe here relates to a release of Anhydrous Ammonia (NH3) from Silver Bay Seafoods Cannery located at 219 S. Harbor Drive alongside of the Valdez Harbor, Valdez, Alaska.

Location: Latitude: 61° 7′ 29.00″ N Longitude: 146° 20′ 45.53″ W

Released Amount: 7,380 lbs (Reportable Quantity (RQ) is 100 lbs)

**Released Description:** Model assumptions – Used worst case atmospheric conditions with a light wind blowing into town and low humidity. Warm ambient air temperature causes higher internal tank pressures. Tank rupture is caused by a large fork lift puncture through the tank wall. The puncture hole is 8" x 3" and located 3 feet from tank bottom.

**Time of Year:** May 2, 2014 @ 0930 hrs (Canneries starting to fire up operations)

**On-Scene Weather:** Winds from the SE at 5 knots. Air Temperature: 55°F. Relative Humidity: 25%. Cloud Cover: 3 tenths.

See Model charts for Toxic / Flammable Threat Zones

*Note*: Graciously modeled by: Mr. John Engles, ADEC – Using ALOHA Version 5.4.4 – ESRI ArcGIS 10.2 for Desktop)

\*\*Toxic Threat Zone: Covers a large area of the Valdez Harbor (includes vessels, fueling station, businesses, and residential properties of Valdez).

\*\*Flammable Threat Zone: Covers a smaller distance but concentrated vapors over fueling dock and a third of the Valdez Harbor, to include local businesses.

Discussion: The primary goal of this response effort is to evaluate the dangers associated with responding to the event with the Valdez Fire Department Level A Hazmat Team, eliminating the potential for impacting Valdez residents, businesses, harbor and sensitive environments.

## **Initial Action Description:**

- Initial call taken by either Coast Guard MSU Valdez personnel, ADEC, or notified via NRC Report received).
- Immediate notification of Captain of the Port, Prince William Sound, and the necessary federal/state/local agency notifications are made based on the Emergency Notification List.
- Valdez Fire Department/Hazmat Team notified
- State Type 1 Spill Response Team activated (initiated by ADEC)
- Commence activation of personnel movement. Initiate ICS-201.

- Incident Command System activated (Unified Command formed).
- COTP establishes Safety Zone around facility.
- USCG drafts POLREP One. ADEC drafts and releases initial SITREP.
- USCG issues Notice of Federal Interest.
- ADEC issues Notice of State Interest in a Pollution Incident.
- Issue Letter of Designation.
- Determine if the spill response is categorically excluded under the national programmatic agreement to protect historic properties, and if not, activate an FOSC Historic Properties Specialist.

# Initial On-Scene Investigation/Inspection Evaluation and Recommendations:

- Develop information from Responsible Party, witnesses, ADEC, etc. on amount released, causal factors, resources at risk, etc.
- Determine evacuation zone and aid in enforcement of.
- Determine total amount of Anhydrous Ammonia stored at facility.
- Collect any equipment/training records for evidence.
- Determine response and clean-up operations.

# **Initial Response Actions:**

- Ascertain the personnel safety hazards.
- Consider establishing a safety zone around facility, and moving any personnel, vessels out of the area.
- Activate response structure including the State of Alaska Type 1 Spill Response Team, the Valdez Fire Department/Hazmat Team, and the Statewide Hazmat Response Team.
- Contact FAA to restrict air space (if necessary)
- Prepare initial press release.
- Request local government support and input through the RSC.

Containment, Countermeasures and Cleanup Strategies:

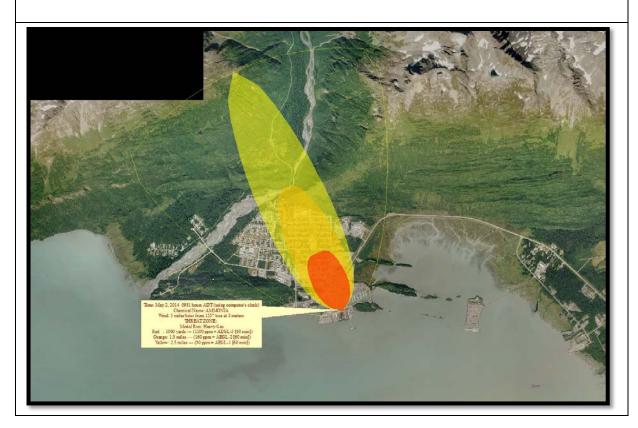
The Unified Command will coordinate and develop an Incident Action Plan to:

- Conduct initial containment / secure source (if warranted)
- Establish staging areas.
- Arrange for proper transportation, communications, ground support (and vessel support for safety zone patrol)

# **Resource Requirements:**

 The initial response will be made by the Valdez Fire Department/Hazmat Team. Additional support may be needed from the Statewide Hazmat Response Team and may also call on the USCG Pacific Strike Team. A spill response kit designed specifically for Anhydrous Ammonia may be obtained from a local contractor.

# **TOXIC THREAT ZONE**





# **FLAMMABLE THREAT ZONE**

9440.2.2 - Inland Scenario: Maximum Most Probable Case

**Event Description:** A series of valve failures at a fish processing facility caused a release of anhydrous ammonia.

**Location:** Within a fish processing facility, Valdez, Alaska.

**Spill Size:** Approximately 9000 pounds of anhydrous ammonia was released to the atmosphere after spilling to the ground surface.

**Spill Description:** During a routine maintenance shut-down, a series of valve failures was noticed by contractors, which caused the release of the entire refrigeration system of 9000 pounds of anhydrous ammonia, over a period of about one hour. Most of the spilled ammonia was contained within the facility, until the maintenance crew began to evacuate the buildings. Vapor clouds of the previously pressurized ammonia sank to the floor, and as the vapor warmed, it began to rise and form a plume approximately 500 yards in diameter.

Time of Year: September

**On-Scene Weather:** Temperatures ranging from the mid 50's during day light hours and near freezing at night. Wind is from the southwest at approximately 3 knots.

**Discussion:** In this case, the primary objective of the first responders to this incident is to initiate the public

notification process to facilitate an orderly evacuation. The evacuation radius for a spill of this size is about  $\square$  mile, which would include a significant portion of the population of Valdez.

**Initial Action Description:** Construction workers in the vicinity of the leak initially complained of a burning sensation in their eyes and throat, and promptly left the building when they heard alarms sounding throughout the facility. A facility evacuation then proceeded. Notification of the spill was made to the National Response Center, the Alaska Department of Conservation and the Valdez Fire Station. Upon receiving notification, the ADEC State On-Scene Coordinator activates the Incident Command System organization per the provisions of the RCP. The operators of the facility assume responsibility of the spill and coordinate evacuation efforts with local authorities. The Valdez Level A Hazmat Team is also activated and prepares to enter the area to secure the source of the release. The ADEC SOSC also places the Statewide Hazmat Response Team on alert for possible activation. Federal and State natural resource trustees were also notified.

**Agency ICS Activation:** Federal and State involvement in this incident will most likely be to oversee and insure that citizens are evacuated or sheltered in-place where necessary.

**Initial On-Scene Investigation / Inspection Evaluation and Recommendations:** Due to the magnitude of the spill and the lack of facility capabilities, evacuation of the facility, the city dock (a popular public use facility), and surrounding area is recommended.

**Initial Response Actions:** Initial response to this incident includes emergency notification and evacuation, plus emergency entry and source control, if possible, by the Valdez Level a Hazmat Team. COTP issues Notice to Mariners to alert the State ferry, fishing vessels, and recreational boaters to the hazard. The fish processing facility is located at the Valdez City Dock and is adjacent to the new Alaska Marine Highway System (AMHS) Ferry Terminal.

**Containment Countermeasures and Cleanup Strategies:** Due to the transient nature of the ammonia, containment and cleanup operations may not apply. However, the facility may have plans to aid in the dissipation of the gas by venting, displacement via an inert gas, or both.

**Resource Requirements:** Immediate notification is essential in this incident to avoid exposure of individuals to dangerous concentrations of ammonia. Workers exposed to the gas may require decontamination prior to transport to the hospital. Like most hospitals in Alaska, the Valdez hospital is small and not equipped for dealing with serious hazmat victims. Serious victims of this incident may need to be stabilized and then sent to Anchorage for specialized care. Expedient decontamination will likely take place in the field through the use of ventilation fans to remove vapor residue from the victims.

9440.2.3 - Inland Scenario - Average Most Probable Case

**Event Description:** A recreational vehicle lost control in a busy intersection, and collided with a truck carrying chlorine cylinders. One of the cylinders was bounced off the truck in the collision, first striking a pedestrian; then, upon hitting the ground, the valve stem on the cylinder cracked, releasing chlorine.

**Location:** At the intersection of the Glenn and Richardson Highways in Glennallen.

**Spill Size:** An estimated 80 pounds of chlorine venting into the atmosphere.

**Spill Description:** As the valve cracked, 80 pounds of gaseous chlorine escaped into the surrounding area. Although the valve vented for approximately 1 minute, the people within 500 yards of the incident were exposed to an IDLH atmosphere. Traffic is backed up on each of the intersections.

Time of Year: July

**On-Scene Weather:** Winds from the N at 2 knots, warm (71 $\square$  F) and humid (87%).

**Discussion:** The highest priority in this incident is to evacuate the remaining population surrounding the incident (or shelter in place), treat victims in the community's hospital. Additional support to aid in evacuation, traffic control and triage may be needed from nearby communities.

**Initial Action Description:** The Glennallen volunteer fire department responds to the incident with the aid of the one State Trooper, and begins the immediate evacuation of the surrounding area. The fire department does not have Level A personal protective equipment or training to perform an immediate plug or patch of the chlorine leak. The ADEC SOSC activates the Statewide Hazmat Team, and the Valdez Hazmat Team begins to respond from their location. Federal and State natural resource trustees were notified. An FOSC Historic Properties Specialist was also activated.

**Agency ICS Activation:** Federal and State involvement in this incident will most likely be to oversee and insure that citizens are evacuated or sheltered in-place where necessary.

**Initial On-Scene Investigation / Inspection Evaluation and Recommendations:** Due to the poisonous/corrosive nature of the gas, and the lack of local response capabilities, evacuation of the surrounding area is recommended.

**Initial Response Actions:** Initial response to this incident includes emergency notification and evacuation.

Containment Countermeasures and Cleanup Strategies: If the cylinder has not already completely vented itself (which is most probable under this scenario), then it will be moved to an isolated area and left to vent in a controlled situation. The Valdez Hazmat Team with assistance from the local fire department will attempt to control the release at the valve through the use of a Chlorine a Kit. If this is unsuccessful, they will attach a hook to the cylinder and slowly drag (from a safe distance) the cylinder to a remote field or other secure location.

**Resource Requirements:** Level A Hazmat response gear is required for entry team members attempting to secure the release along with the Chlorine A Kit. If the release cannot be controlled a grappling device will be needed to snag the cylinder. Additional volunteers from the surrounding communities may be called upon to aid in evacuation efforts.

# 9500 - LIST OF AGREEMENTS

Reference the Regional Contingency Plan – Applicable Memorandum of Understanding/Agreements (MOU/MOA). The MOUs/MOAs are also on the <u>ADEC website</u>.

9600 – CONVERSIONS - TBD

# 9700 - RESPONSE REFERENCES

# 9710 - Relevant Statute/Regulations/Authorities List

SITE NAME AND DESCRIPTION	WEBSITE
Alaska Regional Response Team	www.alaskarrt.org/
Alaska Response Plans – Unified and Area	www.dec.alaska.gov/spar/perp/plan.htm
Alaska Response Maps – ESI, GRS, MESA	www.asgdc.state.ak.us/maps/cplans/areas.html
Alaska Community Database (ADCED)	www.commerce.state.ak.us/dca/commdb/CF COMDB.htm
Alaska Geographic Response Strategies (home)	www.dec.state.ak.us/spar/perp/grs/home.htm
Alaska links to Emergency Response Services	www.linkupalaska.com/ers/
Alaska State – home page	www.state.ak.us
ADEC	www.state.ak.us/dec/home.htm
ADEC – PERP (spill updates, response links)	www.dec.state.ak.us/spar/perp/index.htm
ADF&G	www.state.ak.us/adfg/adfghome.htm
ADMVA – Emergency Services	www.ak-prepared.com
ADNR	www.dnr.state.ak.us
ADNR – SHPO (archaeologists)	www.dnr.state.ak.us/parks/oha web/shpo.htm
Alaska Resource Library	www.arlis.org
Alaska State Library	www.library.state.ak.us
Alaska State Geo-spatial Data Clearinghouse	www.asgdc.state.ak.us
Daylight hours- sunrise/sunset information	www.aa.usno.navy.mil/data/docs/RS OneDay.html
EPA – Region 10	www.epa.gov/r10earth
EPA – Solid Waste and Emergency Response	www.epa.gov/swerrims
National Response Center	www.nrc.uscg.mil/index.htm
NMFS Alaska Region	www.fakr.noaa.gov
Essential Fish Habitat, Info & Maps	www.fakr.noaa.gov/habitat/efh.htm
Marine Mammal Info	www.fakr.noaa.gov/protectedresources/default.htm
NOAA	www.noaa.gov
NOAA Hazmat	www.response.restoration.noaa.gov
SERC & LEPCs	www.ak-prepared.com/serc
State Regulations – Title 18 AAC Index	www.state.ak.us/dec/title18/18aacdnl.htm
U.S. DOT – Hazmat Safety	www.hazmat.dot.gov
USCG – Sector Anchorage	www.uscg.mil/d17/msoank/msoank.htm
USCG – Marine Safety	www.uscg.mil/hq/g-m/gmhome.htm
USCG Certificate of Financial Responsibility	www.cofr.npfc.gov
USCG Port State Information Exchange (PSIX)	www.psix.uscg.mil/Default.asp
USCG Vessel Response Plans (VRP) & Shipboard	
Oil Pollution Emergency Plans (SOPEP)	www.uscg.mil/vrp
U.S. Code	www.uscode.house.gov/usc.htm
U.S. Code of Federal Regulations	www.access.gpo.gov/nara/cfr/index.html
SITE NAME AND DESCRIPTION	WEBSITE
Alaska Regional Response Team	www.alaskarrt.org/
Alaska Response Plans – Unified and Area	www.dec.alaska.gov/spar/perp/plan.htm
Alaska Response Maps – ESI, GRS, MESA	www.asgdc.state.ak.us/maps/cplans/areas.html
Alaska Community Database (ADCED)	www.commerce.state.ak.us/dca/commdb/CF_COMDB.htm
Alaska Geographic Response Strategies (home)	www.dec.state.ak.us/spar/perp/grs/home.htm
Alaska links to Emergency Response Services	www.linkupalaska.com/ers/
Alaska State – home page	www.state.ak.us
ADEC	www.state.ak.us/dec/home.htm
ADEC DEDD ( 'II 1 )	
ADEC – PERP (spill updates, response links)	www.dec.state.ak.us/spar/perp/index.htm
ADEC – PERP (spill updates, response links) ADF&G	www.dec.state.ak.us/spar/perp/index.htm www.state.ak.us/adfg/adfghome.htm

ADNR – SHPO (archaeologists)	www.dnr.state.ak.us/parks/oha_web/shpo.htm
Alaska Resource Library	www.arlis.org
Alaska State Library	www.library.state.ak.us
Alaska State Geo-spatial Data Clearinghouse	www.asgdc.state.ak.us
Daylight hours- sunrise/sunset information	www.aa.usno.navy.mil/data/docs/RS_OneDay.html
EPA – Region 10	www.epa.gov/r10earth
EPA – Solid Waste and Emergency Response	www.epa.gov/swerrims
National Response Center	www.nrc.uscg.mil/index.htm
NMFS Alaska Region	www.fakr.noaa.gov
Essential Fish Habitat, Info & Maps	www.fakr.noaa.gov/habitat/efh.htm
Marine Mammal Info	www.fakr.noaa.gov/protectedresources/default.htm
NOAA	www.noaa.gov
NOAA Hazmat	www.response.restoration.noaa.gov
SERC & LEPCs	www.ak-prepared.com/serc
State Regulations – Title 18 AAC Index	www.state.ak.us/dec/title18/18aacdnl.htm
U.S. DOT – Hazmat Safety	www.hazmat.dot.gov
USCG – Sector Anchorage	www.uscg.mil/d17/msoank/msoank.htm
USCG – Marine Safety	www.uscg.mil/hq/g-m/gmhome.htm
USCG Certificate of Financial Responsibility	www.cofr.npfc.gov
USCG Port State Information Exchange (PSIX)	www.psix.uscg.mil/Default.asp
USCG Vessel Response Plans (VRP) & Shipboard	
Oil Pollution Emergency Plans (SOPEP)	www.uscg.mil/vrp
U.S. Code	www.uscode.house.gov/usc.htm
U.S. Code of Federal Regulations	www.access.gpo.gov/nara/cfr/index.html

# 9710.1 – Federal Authorities

OPA 90, section 4202 amended Subsection (j) of Section 311 of the Federal Water Pollution Control Act (FWPCA; 33 U.S.C. 1321 (j)) to address National Planning and Response System development. As part of this system, Area Committees are to be established for each area designated by the President. These Area Committees are to be comprised of personnel from federal, state, and local agencies. Each Area Committee, under the direction of the Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC) for the area, is responsible for developing an ACP, which when implemented in conjunction with the NCP, shall be adequate to remove a worst case discharge and mitigate or prevent a substantial threat of such discharge from a vessel, offshore facility, or onshore facility operating in or near the geographical area. Each Area Committee is also responsible for working with state and local officials to preplan for joint response efforts, including designing appropriate procedures for mechanical recovery, chemical dispersal, shoreline cleanup, protection of sensitive environmental areas, and protection, rescue, and rehabilitation of fisheries and wildlife. The Area Committee is also required to work with State and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

The functions of designating areas, appointing Area Committee members, determining the information to be included in ACPs, and reviewing and approving ACPs have been delegated by Executive Order 12777 of 22 October 1991 to the Commandant of the U.S. Coast Guard (through the Secretary of Transportation) for the coastal zone and to the Administrator of the Environmental Protection Agency for the inland zone. The term "coastal zone" is defined in the current NCP (40 CFR 300.5) to mean all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, the waters of the Exclusive Economic Zone (EEZ), and the land substrata, ground waters, and ambient air proximal to those waters. The term "inland zone" is defined in the current NCP to mean the environment inland of the Coastal Zone. These terms delineate an area of responsibility for response action. Precise

boundaries are determined by existing federal and State agency memoranda of understanding/agreements (MOU/MOA).

In Volume 57, Federal Register Notice 15001 published on April 24, 1992, the EPA and USCG jointly announced the Designation of Areas and Area Committees under OPA for inland and coastal zones. Due to the split of jurisdiction and responsibilities between EPA and the USCG and the inherent differences in organizational structure of the two agencies, each agency took separate but compatible approaches in establishing initial designations. Nationwide, the EPA designated the existing 13 "RRT areas" as the initial areas for which ACPs must be prepared in the Inland Zone, while the USCG designated the coastal portions of the existing Captain of the Port (COTP) zones as the initial areas for which ACPs must be prepared in the Coastal Zone. In Alaska, this has the effect of initially establishing one statewide inland area by EPA and three coastal areas, corresponding to the boundaries of the three USCG COTP zones. Both EPA and USCG have authority to further subdivide initial Areas, both coastal and inland, into smaller, more localized areas for which ACPs can be developed.

Also, per the National Contingency Plan, the Department of Defense (DOD) and the Department of Energy (DOE) shall provide their own FOSCs, who will be responsible for taking all response actions to releases of hazardous substances, pollutants, or contaminants when the release is on, or the sole source of the release is from, any facility or vessel (including bareboat-chartered and operated vessels) under their jurisdiction, custody or control.

#### 9710.2 – State Authorities

The State Oil and Hazardous Substance Discharge Prevention and Contingency Plan (State Master Plan) was prepared by the Alaska Department of Environmental Conservation (ADEC) as required by AS 46.04.200. The State Emergency Response Commission (SERC) reviews the plan as required by AS 26.23.077.

Under AS 46.03.020(10) (A), the ADEC is empowered to adopt regulations providing for the control, prevention, and abatement of all forms of pollution.

In 1980 legislation was enacted which defined the State's policies regarding oil spills. The purpose of this law is to provide for the safety and protection of human health and welfare of Alaskans from damage resulting from oil spills and to provide the ability to clean up a spill and restore damaged areas.

The Findings and Intent section of Chapter 116 SLA 1980 ("An Act relating to the prevention and control of oil pollution; and providing for an effective date") clearly sets forth state policy:

- It is a matter of the highest urgency and priority to protect Alaska's coastal and inside water, estuaries, wetlands, beaches and land from the damage which may be occasioned by the discharge of oil;
- The storage, transfer, transportation and offshore exploration for and production of oil within the
  jurisdiction of the State are hazardous undertakings; oil discharges may cause both short-term and
  long-term damage to the environment and the beauty of the state, to owners and users of affected
  property, to public and private recreation, to residents of the state and other interests deriving
  livelihood from fishing, hunting, tourism and related activities;
- Assuring sufficient capability, among industrial and commercial interests, and the State and federal
  governments, to contain and clean up discharges of oil is of vital public interest; weather conditions,
  logistic constraints and the relative paucity of labor and equipment resources in the state increase the
  difficulty of oil discharge containment and cleanup in Alaska, making imperative an active State role;

It is the policy of the State that, to the maximum extent practicable, prompt and adequate containment and cleanup of oil discharges is the responsibility of the discharger; it is therefore of the utmost importance to assure that those engaged in oil storage, transfer, transportation, exploration and production operations have sufficient resources and capabilities to respond to oil discharges, and to provide for compensation of third persons injured by those discharges; and

The State should continue its cooperative relationships with appropriate federal agencies, protecting
its legitimate interests while working to remove any duplicative or potentially conflicting regulatory
activities.

*In 1989, legislation* was enacted by the Alaska Legislature to further strengthen the State's capability to deal with oil spills:

# Findings and purpose:

- The Legislature finds that the March 24, 1989 oil spill disaster in Prince William Sound demonstrates
  a need for the State to have an independent spill containment and cleanup capability in the event of
  future discharges of oil or a hazardous substance.
- The purpose of this Act is to assure people of the state that their health, safety and well-being will be
  protected from adverse consequences of oil and hazardous substance releases that present grave and
  substantial threats to the State's economy and environment.

*In 1990, the law was revised again.* In order to meet the goal of protecting Alaska's people and environment, AS 46.04.200 set forth required Plan elements:

- To take into consideration the elements of an oil discharge contingency plan approved or submitted for approval under AS 46.04.030;
- To include an incident command system that clarifies and specifies responsibilities for State, federal, and municipal agencies, facility operators, and private parties whose property may be affected by a catastrophic oil and/or hazardous substance discharge;
- To identify actions necessary to reduce the likelihood of catastrophic oil discharges and significant discharges of hazardous substances.

Alaska Statutes, Sections 46.04.200-210 specify state requirements for Oil and Hazardous Substance Discharge and Prevention Contingency Plans. This RCP, along with the ACPs, were written with the goal that they would meet both federal and State planning requirements in Alaska.

# 9720 - Relevant Instructions/Guidelines/Standard Procedures and Practices List

The following are helpful resources for any response or exercise spanning numerous incident types and situations:

- The USCG Incident Management Handbook
- The Alaska Incident Management System (AIMS) Guide for Oil and Hazardous Substance Response
- The Alaska Department of Environmental Conservation, Spill Tactics for Alaska Responders (STAR)
   Manual

Note: None of these guides is specifically prescribed by this plan, and none is mandated for use by response plan holders or potential responsible parties. Federal and State On-Scene Coordinators will work

with the response organization established by the responsible party in responding to and managing oil or hazardous substance releases as long as their organization is compatible with ICS principles

# 9730 – Area Contingency Plans

All Alaska Area Contingency Plans can be viewed on the ADEC website.

# 9740 - Geographic Response Strategies

The Geographic Response Strategies (GRS) are designed to be a supplement to the Prince William Sound (PWS) Area Contingency Plan for Oil and Hazardous Substances Spills and Releases, commonly referred to as the PWS Area Contingency Plan (SCP). GRS provide response strategies for the protection of selected sensitive areas to aid first responders to an oil spill. The strategies here serve as the federal and state on-scene coordinators' "orders" during an oil spill in the area covered by this GRS. As such, they have been approved by the U.S. Coast Guard Marine Safety Office and the Alaska Department of Environmental Conservation.

Implementation of these Geographic Response Strategies is the third phase of an oil spill response. The first and primary phase of the response is to contain and remove the oil at the scene of the spill or while it is still on the open water, thereby reducing or eliminating impact on shorelines or sensitive habitats. If some of the spilled oil escapes this tactic, the second phase, which is no less important, is to intercept, contain and remove the oil in the nearshore area. The intent of phase two is the same as phase one: remove the spilled oil before it impacts sensitive environments. If phases one and two are not fully successful, phase three is to protect sensitive areas in the path of the oil. The purpose of phase three is to protect the selected sensitive areas from the impacts of a spill or to minimize that impact to the maximum extent practical.

The sites selected for development of Geographic Response Strategies are not meant to be exclusive; other sensitive sites may require protection during any given spill. The fact that a GRS may not have been developed for a certain sensitive site does not mean that site should not be protected if it is threatened by an oil spill.

These strategies are intended to be flexible to allow the spill responders to modify them, as necessary, to fit the prevailing conditions at the time of a spill. Seasonal constraints, such as ice or weather, may preclude implementation of some of the strategies in the winter months. It is not intended that all the sites be automatically protected at the beginning of a spill, only those that are in the projected path of the spill. The strategies developed for the selected sites were completed with a focus on minimizing environmental damage, leaving as small a footprint as possible to support the response operations. Equipment deployment strategies were developed that will not cause more damage than the spilled oil. To test these GRS, each site will be visited and equipment may be deployed according to the strategy, to ensure that the strategy is the most effective in protecting the resources at risk at the site. Revisions will be made to the strategies, and this document, if changes are indicated by site visits, drills or actual use during spills.

The PWS Area has been divided into five Geographic Response Zones (Figure G-1-1). The Copper River Delta Flats Zone strategies were developed through a separate Work Group process and are not included in this document. The Copper River Delta Flats GRS are considered a separate annex to the PWS Area Contingency Plan at this time.

# **How to Use These Geographic Response Strategies**

The information provided here supplements information provided in the Prince William Sound SCP and the Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substances Discharge/Releases (commonly referred to as the RCP). Information provided in either of those plans is not duplicated herein. This document is intended for use by response professionals already familiar with spill response techniques.

Part 2 contains a general description of the protection/recovery tactics utilized throughout the GRS. Each general description contains the tactic objective, deployment depictions, resource sets required to implement the tactic, and deployment considerations and limitations. These general tactics may be adapted to produce a protection scheme for any site in Prince William Sound.

Part 3 contains site-specific response strategies. An index at the beginning of each sub-section shows the location of the selected sites. Each GRS consists of two parts: 1) a graphic showing a map, deployment diagram, picture and implementation notes; and 2) a matrix giving the location description, response strategy, response resources, staging area, site access, natural resources being protected and special considerations.

# Who to Contact for Input

Comments and recommendations on these GRS are welcomed. Please send your comments to either of the following agencies:

Alaska Department of Environmental Conservation Prevention and Emergency Response Program 555 Cordova Street Anchorage, AK 99501

United States Coast Guard Captain of the Port, Valdez, Alaska Marine Safety Office Valdez PO Box 486 Valdez, AK 99686

# **How the Document Was Developed**

These GRS were developed through a cooperative, work group process involving federal, state, and local spill response experts working with representatives from the oil production and transportation industry, citizens' groups, and natural resource agencies. The Prince William Sound GRS Work Group developed the GRS for the Northwest, Northeast, Southeast, and Southwest Zones. The Copper River Delta Flats zone GRS were developed by a separate work group.

Work Group participants identified sensitive areas with potential to be classified as "Areas of Major Concern" under the criteria established in the PWS Area Plan. These potential sites were evaluated by the additional criteria of 1) risk of being impacted from a water borne spill; and 2) feasibility of successfully protecting the site with existing technology. Using this process, the work group selected a preliminary list of sites that was released for public input. Feedback on site selection was solicited from tribal

representatives, user groups, environmental organizations and the general public. Based on the feedback received, the work group made the final site selections for the zone. Additional sites may be selected in the future.

A PWS Tactics committee, composed of spill response professionals, was formed to develop draft strategies for each site selected. The draft strategies were reviewed and approved by the entire Work Group and the final draft was forwarded to the PWS Area Committee with the recommendation that it be adopted as part of the Prince William Sound SCP.

# PRINCE WILLIAM SOUND GRS WORKGROUP

The Prince William Sound GRS Work Group developed GRSs for the Northwest (NW), Northeast (NE), Southeast (SE), and Southwest (SW) GRS zones. The work group consisted of representatives from the following organizations:

- Alaska Chadux Corporation
- \*Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- Alaska Tanker Company
- Alyeska Pipeline Service Company Ship Escort and Vessel Response Service
- British Petroleum
- Conoco/Phillips
- Cook Inlet Spill Prevention and Response, Inc.
- Chenega Village IRA Council
- ChevronTexaco
- Crowley Marine Services
- National Oceanic and Atmospheric Administration
- National Marine Fisheries Service
- Polar Tanker Company
- Prince William Sound Regional Citizens' Advisory Council
- SeaRiver Maritime
- Tatitlek Village IRA Council
- \*Tesoro Alaska Company
- United States Coast Guard
- United States Environmental Protection Agency
- United States Department of the Interior
- United States Fish and Wildlife Service
- United States Forest Service

The work group developed the site selection matrix key, page G-1-5, to aid in the selection of sites from within the four PWS GRS Zones. The resulting tables, tables G-1-1, G-1-2, G-1-3, and G-1-4, consist of identified sites in each row, with information about resources at each site that could qualify the site as an area of major concern detailed in the columns.

Figures G-1-2 through G-1-5 show the location of GRS sites in the Northwest, Northeast, Southeast, and Southwest zones. GRS for the Copper River Delta Flats are contained in the Copper River Delta Flats GRS document.

The GRS Site Specific Response Strategies Introductory Text and Index Maps are available on the ADEC Website at: <a href="http://dec.alaska.gov/spar/ppr/grs/pws/home.htm">http://dec.alaska.gov/spar/ppr/grs/pws/home.htm</a>

#### **GEOGRAPHIC RESPONSE STRATEGIES: REFERENCES**

# **SENSITIVE AREAS**

<sup>\* =</sup> co-chairs

Prince William Sound Area Plan for State Lands (includes data element reports for cultural resources, fish and wildlife, recreation and tourism, subsurface resources, timber), 1988 ...... ADF&G Guidelines for Developing Digital Environmental Sensitivity Index Atlases and Databases, 1993 ...... NOAA Climatic Atlas, Volume 1: Gulf of Alaska, 1988 ......National Climatic Data Center (NCDC) and Arctic Environmental Information and Data Center (AEIDC) Environmental Sensitivity Mapping for Developing and Evaluating Spill Response Plans a Working Paper for the Regional Workshop on Designing a Geographic Information System for Oil Spills, 1994 NOAA, EPA Sensitivity of Coastal Environments and Wildlife to Spilled Oil Prince William Sound/Copper River Delta, Alaska an Atlas of Coastal Resources, 1993 ......RPI Prince William Sound Sensitive Areas (four seasonal summary maps) ......RPI Tidal Current Tables: Pacific Coast of North America and Asia (Current year's edition)... US Department of Commerce **LAND OWNERSHIP** Prince William Sound Area Plan for State lands at http://wwwdnrstateakus/mlw/planning/areaplans/prince/indexcfm ......................ADNR Municipality of Anchorage Property Maps at http://giswebcianchorageakus/website/anchorage/application/maphtmAlaska State Geo-Spatial Data Clearinghouse (ASGDC) **EQUIPMENT & TECHNIQUES** Field Guide for Oil Spill Response in Arctic Waters, 1998, at http://www.arctic-councilorg/fldguide/ ......Arctic Council Oil Containment Boom: Design, Deployment, Use Recovery & Cleaning ............ Clean Sound Cooperative Oil Spill Response in Fast Currents, A Field Guide, Coast Guard Report #CG-D-01-02, 2001 US Coast Guard USCG Commandant (G-M) Letter 16465, Revised Guidelines for Conducting the USCG's OSRO Program, World Catalog of Oil Spill Response Products, 1998/1999 .......Robert Schulze **GIS DATABASES** Alaska Department of Natural Resources ...............................Alaska Geospacial Data Center, Anchorage Alyeska Pipeline Service Company, Geographic Resource Database (GRD) ....... Sharon Marchant, Valdez City of Cordova ......Planning Department, GIS project National Oceanic and Atmospheric Administration ......John Whitney, Anchorage Prince William Sound Science Center .......Walter Cox, Cordova US Forest Service ....... Paula Smith or Karin Preston, Anchorage

### 9750 – Potential Places of Refuge

A "place of refuge" is defined as a location where a vessel needing assistance can be moved to, and where actions can then be taken to stabilize the vessel, protect human life, reduce a hazard to navigation, and/or protect sensitive natural resources and other uses of the area (e.g., subsistence collection of mussels, commercial fishing, recreational boating). A place of refuge may include constructed harbors, ports, natural embayments, potential grounding sites, or offshore waters. This section identifies potential docking, anchoring, mooring, and grounding locations that may be selected as Places of Refuge in the Prince William Sound Area. Actual designation of a Place of Refuge will always be an incident-specific decision made by the U.S. Coast Guard Captain of the Port for Prince William Sound.

Prince William Sound (PWS) has many miles of environmentally sensitive coastline. In addition to sensitive shoreline habitats such as marshes, sheltered tidal flats, and exposed tidal flats, PWS supports a number of sensitive biological resources including birds, fish and shellfish, and marine mammals. Additional information about identification of sensitive areas and resources may be found in Section D of the SCP. Additional information about protection of sensitive area may be found in Section G of the SCP.

PWS is managed under a variety of land use management plans including:

Chugach National Forest, Revised Land and Resource Management Plan<sup>2</sup>, Management Plan for State Marine Parks: Prince William Sound and Resurrection Bay<sup>3</sup>, and Prince William Sound Area Plan for State Lands<sup>4</sup>.

PWS is also widely used for marine commerce. Oil tanker vessels, log transport ships, fuel barges, freighters, oil industry work boats, ferries, and cruise ships make routine stops at PWS ports. Also, commercial fishing boats, sport fishing charter boats, and privately-owned vessels regularly use local harbors and docks.

There is no perfect docking, mooring, anchoring, or grounding site for all vessels in all situations. Deep draft vessels, such as oil tankers and cruise ships, cannot be taken to certain locations. Some ports may have shallow approaches or small bays, and deep draft ships cannot enter these locations. However, shallow draft vessels, such as fishing vessels and charter vessels, may be able to utilize these shallower ports. For the purposes of this section, vessels have been divided into three categories: deep draft, light draft and shallow draft.

**Deep Draft Vessels** are vessels that exceed 20,000 Gross Tons. These vessels have drafts of 25 to 60 feet and range in size from 450 to 1,000 feet long. Cruise ships and crude oil tankers are the predominant deep draft vessels operating in Prince William Sound.

**Light Draft Vessels** are vessels of 300 to 19,999 Gross Tons. These vessels have drafts of up to 25 feet and range in size from 200 to 450 feet in length. Freighters and ferries are the most common light draft vessels operating in Prince William Sound.

<sup>&</sup>lt;sup>2</sup> USDA, Forest Service, Alaska Region, Chugach National Forest. May 2002.

<sup>&</sup>lt;sup>3</sup> Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation. March 1995.

<sup>&</sup>lt;sup>4</sup> Alaska Department of Natural Resources and Alaska Department of Fish and Game. June 1988.

**Shallow Draft Vessels** are less that 300 Gross Tons, generally draw less than 15 feet and are less than 200 feet in length. Fishing vessels, fishing tenders, tour boats, and pleasure craft make up the majority of the shallow draft vessels operating in Prince William Sound.

The information in this section may be used for a vessel of any size that has suffered an incident that creates need for a temporary place of safe refuge, but it is focused on deep draft and light draft size vessels, since there are more potential places of refuge for shallow draft vessels. Some potential places of refuge appropriate only for shallow draft vessels are designated, however many more potential places of refuge for shallow draft vessels exist in PWS.

# **HOW THE DOCUMENT WAS DEVELOPED**

This section was developed in 2004 by a Work Group of interested and knowledgeable stakeholders in keeping with the Alaska Regional Response Team's "Guidelines for Places of Refuge Decision-Making." The Work Group arrived at a consensus on the potential places of refuge and submitted this document to the Area Committee for approval and inclusion in the Prince William Sound Area Contingency Plan. The Work Group participants represented the following organizations:

Alaska Department of Environmental Conservation

Alaska Department of Natural Resources

Alaska Department of Fish and Game

Alyeska Pipeline Service Company/Ship Escort/Response Vessel System (SERVS)

Chugach Alaska Corporation

Cook Inlet Regional Citizens' Advisory Council

Prince William Sound Regional Citizens' Advisory Council

Prince William Sound Response Planning Group

Southwest Alaska Pilots Association

U.S. Coast Guard, District 17

U.S. Coast Guard, Valdez Marine Safety Office

U.S. Dept. of Agriculture, Forest Service, Alaska Region, Chugach National Forest

U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration (NOAA)

U.S. Dept. of the Interior, and U.S. Environmental Protection Agency (EPA).

The first step of the PPOR process was to identify candidate sites (anchorages, moorings, docks/piers, and potential grounding sites) within the PWS Area. The Workgroup began by researching available information to determine major risk factors in the PWS Area. Maps were developed (see the Background section of this plan), depicting the following risk and logistical information:

Locations of bulk fuel facilities;

Primary traffic routes for State ferries and cruise ships;

Primary traffic routes for crude oil tankers;

Locations of frequent fishing vessel/tramper offload activities;

Locations of key nearshore fishing grounds, hatcheries and remote release sites;

Locations of previous major marine spill events;

Locations of lingering oil from the Exxon Valdez spill in 1989; and

Locations of spill response hubs and equipment depots.

The second step was to identify a total of 66 PPOR within the PWS Area. A site assessment matrix (Table H-2) and key (Table H-1) was developed. This matrix consists of identified sites in each row with information about risk factors and site selection criteria in the columns. The information presented for each site includes:

POR identification

Name

Location

Maximum vessel size

Swing room or dock face length

Bottom type

Exposure/protection

Conflicting uses

Sensitive resources

Response options

Distance to population centers

Distance to alternate PPOR.

POR identifications are alpha-numeric; the beginning letter indicates the type of site, as follows:

- Anchorages begin with A
- Docks and piers begin with D
- Potential grounding site begin with G
- Moorings begin with M.

The number following the beginning letter is a unique site identifier with no importance attached to the magnitude of the number. The locations of potential places of refuge (anchorages, moorings, docks/piers, and potential grounding sites) are shown on Figure H-9.

The site assessment matrix contains potentially suitable emergency anchorage, docking, moorage, and potential grounding locations based on operational factors such as water depth, swing room, exposure/protection, and navigational approach. Sites are grouped by the maximum vessel size category suitable for the site. The PPOR sites identified for shallow draft vessels should only be considered a partial list as there are many suitable sites available in PWS for the shallow draft vessel category (less than 300 gross tons).

Step 3 was to identify specific factors that should be considered as part of the site assessment process. These factors include:

- Distance from population and logistics centers;
- Proximity to environmentally sensitive areas, wildlife resources, threatened or endangered species or habitats, and/or historic properties;
- Uses, such as fisheries, mariculture sites, tourism and recreational use, subsistence use, and the location of public or private facilities;
- Response factors such as booming feasibility and the proximity to existing Geographic Response Strategies (GRS) sites; and
- The distance from the closest alternative PPOR.

Figure H-10 is a composite map of all PPOR and risk factors combined.

#### HOW TO USE THE POTENTIAL PLACES OF REFUGE SECTION

The "Guidelines for Places of Refuge Decision-Making" will be used for places of refuge decision-making in Prince William Sound. As outlined in the guidelines, when the U.S. Captain of the Port (COTP) receives a request from a vessel master or his/her representative to move a vessel to a place of refuge--or in the event there are no individuals on board the vessel authorized to make the request, or the vessel has been abandoned and the COTP needs to consider moving the vessel to a place of refuge--the COTP will initiate the decision-making process. If the COTP/ Unified Command determines that places of refuge should be considered for an incident-specific response, the information in the PWS PPOR document may be used to provide background information to help expedite the incident-specific place of refuge decision. The steps of the decision-making process are summarized as:

- 1. Place of refuge assistance requested
- 2. Immediate action required by COTP
- 3. COTP/Unified Command evaluates vessel options
- 4. COTP/Unified Command selects vessel option
- 5. COTP/Unified Command evaluates potential places of refuge based on operational criteria
- 6. COTP/Unified Command selects potential places of refuge based on operational criteria
- 7. Stakeholders provided with places of refuge options, and provide ranking of places of refuge options
- 8. Stakeholders provide ranking of places of refuge options
- 9. COTP/Unified Command selects places of refuge
- 10. COTP/Unified Command prepares documentation of decision.

The information provided in this document should help decision-making by providing site-specific information to the COTP/Unified Command.

# **INDEX OF PPOR MAPS**

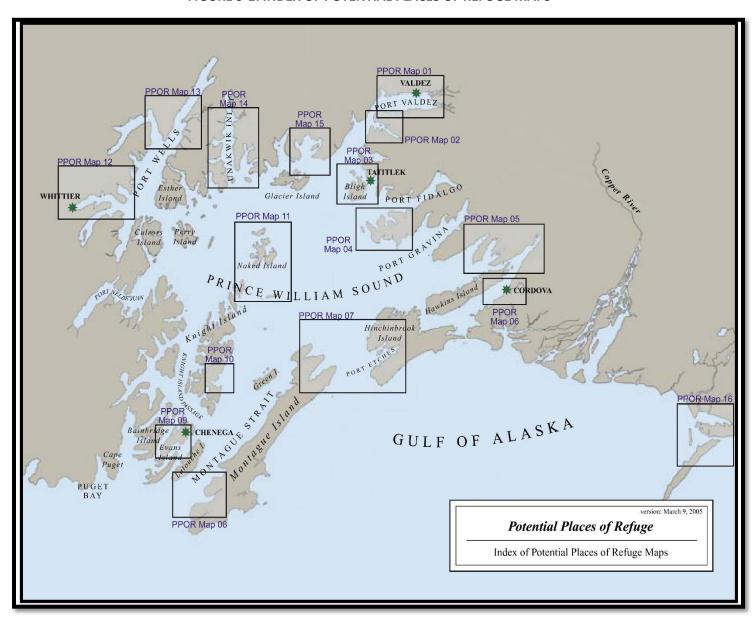
The Workgroup developed 16 PPOR Maps within PWS to aid in the site assessment process. These maps are larger in scale, showing a small portion of the Area in more detail than the maps in Part One. The Prince William Sound PPOR Index map provides an overview of the PWS Area, identifying the location of each PPOR Map. Each PPOR Map has been assigned an identifying number, which has no relevance other than as a map identifier.

Each PPOR Map consists of two parts: 1) a graphic showing a locator map, picture, and detailed nautical charts showing the location of anchorages, docks, moorings, potential grounding sites and other information critical to the selection of a place of refuge; and 2) a series of tables providing site information regarding local site conditions, environmental sensitivities and other considerations.

Please visit the Prince William Sound PPOR website for copies of the PPOR Map Index <a href="http://dec.alaska.gov/spar/ppr/response-resources/ppor/pws/">http://dec.alaska.gov/spar/ppr/response-resources/ppor/pws/</a>

9750.1 - Index of Potential Places of Refuge Maps

FIGURE 9-2: INDEX OF POTENTIAL PLACES OF REFUGE MAPS



# 9750.2 - Site Assessment Matrix

# FIGURE 9-3: SITE ASSESSMENT MATRIX

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A03	Map-01	Gold Creek Anchorage	61.07.64	146 27.05	D	1100	М	S,W,E	R,SF,S,AQ	B,G	R	V-2.75	2.7 A04	
	Map-01	Valdez Container Terminal	61 07.28	146 18.48	D	700		S,W	C/I,AQ	В	R	V-0	0.2 A04	
	Map-01	Valdez Marine Terminal-#1	61 05.40	146 24.21	D	390		N,W	C/I,AQ	В	R	V-2.75	0.7 M12	
	Map-01	Valdez Marine Terminal-#3	61 05.39	146 23.04	D	122		N,W	C/I,AQ	В	R	V-0	0.7 M12	
	Map-01	Valdez Marine Terminal-#4		146 23.74	D	122		N,W	C/I,AQ	В	R	V-0	0.7 M12	
	Map-01	Valdez Marine Terminal-#5	61 05.40	146 24.22	D	122		N,W	C/I,AQ	В	R	V-0	0.7 M12	
	Map-02	North Jack Bay Anchorage	61 02.41	146 37.30	D	1200	М	E	S,CF,A,SF,R	B,G	H,I	V-12.5, T-13.7	6.4 A02	
	Map-02	South Jack Bay Anchorage	61 01.98	146 37.49	D	1800	М	Ē	S,CF,A,SF,R	B,G	H,I	V-12.5, T-13.7	6.4 A02	
	Map-04	Knowles Head Anchorage	60 38.85	146 36.75	D	6500	M,C	S,W,E	C/I	5,0	R	T-16	13.4 A19	
	Map-07	Port Etches Anchorage	60 20.59	146 33.84	D	2300	C	E,W	S,CF,R	B,G	H,M	C-49	12.5 A29	
	Map-07	Zaikof Bay Anchorage	60 19.42	146 57.98	D	5000	М	NE	A,CF,R	B,G	H.I	C-47, CH-43	12.5 A28	
	Map-07	Port Etches Moorage	60 20 39	146 33.20	D	2300	1	E,W	S,CF,R	В	H,I	C-49	12.5 A28	
	Map-08	Macleod Harbor Anchorage	59 52.93	147 47.06	D	1600	M,S	SW	S,A,CF,R	B,G	R	CH-21	19.5 A32	
	Map-11	North Smith Island Anchorage	60 31.90	147 22.67	D	1900	M	N,E,W	S	-,-	R	CH-36,W-44,V-48	7.0 A37	
	Map-11	Outside Bay Anchorage	60 38.26	147 29.48	D	1750	М	E	CF	B,G	H,R	W-37, V-47,T-31	7.0 A36	
	Map-11	McPherson Bay Anchorage	60 40.65	147 21.79	D	1750	М	NE	R	В	R	T-24.5,V-41,W-41	9.5 A36	
	Map-12	Pigot Bay Anchorage	60 50.76	148 22.42	D	1300	М	E	CF,R,AQ	В	I	W-15	10.5 A40	
	Map-12	Whittier Cruise Ship Dock	60 46.71	148 41.83	D	660		NE	C/I,R,AO	В	R	W-0	3.2 A41	
	Map-12	DeLong Pier	60 46.71	148 40.05	D	425		NE	C/I,R,AQ	В	R	W-0	3.0 A41	
	Map-13	South College Fjord Anchorage	61 03.53	147 56.59	D	1850	М	N,S	A,SF,CF,R	В	М	W-30.5	14 A46	
	Map-13			147 55.71	D	3200	М	N,S	A,SF,CF,R	В	М	W-33.3	15 A46	
		aces of Refuge for LIGHT DRAFT												
	Map-01	West Sawmill Spit Anchorage	61 05.39	146 25.79	L	1200	M,G	N,W	R,AQ	B,G	I	V-3.0	0.7 D08	
	Map-01	Valdez City Dock	61 07.39	146 21.69	L	600	,-	S,W	C/I,SF,AQ	В	R	V-0	0.2 D05	
	Map-01	SERVS Dock	61 07.39	146 21.45	L	560		S,W	C/I,AQ	В	R	V-0	0.2 A04	
	Map-01	Valdez Petroleum Terminal	61 07.40	146 21.45	L	200		W	C/I,AQ	В	R	V-0	0.5 A01	
	Map-01	SERVS Buoys in Port Valdez	61 06.41	146 16.42	L	2000		W	C/I,AQ	В	R	V-2.0	1.4 D07	
	Map-03	Black Point/Tatitlek Narrows Anchorage	60 54.93	146 45.00	L	1800	H,G	NW	CF,S,R,AQ	B,G	H,I	T-3.7	3.6 D18	
	Map-03	Boulder Bay/Tatitlek Anchorage	60 51.35	146 40.04	L	1400	M	S	SF,S,R,AQ	B,G	H,R	T5	0.8 D18	
	Map-04	East Two Moon Bay Anchorage	60 45.41	146 32.88	L	1200	М	N	CF.R	B,G	I	T-7.6	8.0 A16	
	Map-04	West Two Moon Bay Anchorage	60 45.24	146 33.63	L	1300	М	N	CF,R	B,G	I	T-7.6	8.0 A16	
	Map-05	Sheep Bay Anchorage	60 38.16	146 02.42	L	3600	М	SW	R,S,CF	B,G	I	C-14.5	13.5 A23	
	Map-05	Nelson Bay Anchorage	60 39.01	145 39.36	L	3000	М	SW	R	В	I	C-6.5	8.0 A24	
	Map-06	Spike Island Anchorage	60 33.11	145 46.25	L	550	M,S	NE	R, AQ		R	C3	0.2 D08	
	Map-06	Cordova City Dock	60 32.92	145 45.99	L	300	,-	NE	C/I, R,S,AQ	В	R	C-0	0.2 A24	
	Map-06	Cordova Municipal Dock	60 33.46	145 45.32	L	408		N,W,S	C/I, R,S,AQ	В	R	C-0	0.2 A24	
	Map-06	Cordova T-Dock	60 32.89	145 46.07	L	263		N,W,S	C/I, R,S,AQ	В	R	C-0	0.2 A24	
	Map-09	West Sawmill Bay Anchorage	60 03.19	148 03.17	L	875	M,SH,R		CF,R,AQ	В	I	CH-1.4	1.0 D34	
	Map-09	East Sawmill Bay Anchorage	60 03.50	148 02.23	L	750	M,SH		CF,R,AQ	В	I	CH-1.4	1.5 D34	
	Map-09	Chenga Ferry/Tramper Dock	60 03.73	148 00.80	L	300		E	C/I, R,CF,AQ	В	R	CH-0	1.0 A32	
	Map-10	Snug Harbor Anchorage	60 14.77	147 43.30	L	2000	G	E	S	В	R	CH-18.5	16.8 A32	
	Map-11	Bass Harbor Anchorage	60 37.88	147 24.18	L	500	М	S,SE	CF	B,G	R	CH-42,V-54,W-44,T-40	5.6 A37	
	Map-11	South Smith Island Anchorage	60 30.98	147 21.84	L	1000	М	W,SW,E	S		R	W-37, V-47,T-31	7.0 A36	
	Map-11	Outside Bay Moorage	60 38.07	147 28.82	L	1400		W	CF	B,G	H,R	W-37, V-47,T-31	7.0 A36	
	Map-12	Bush Banks Anchorage	60 48.17	148 35.95	L	1200	М	N,W	R,A	В	R	W-3.2	2.4 A40	
D45	Map-12	Whittier Ferry Dock	60 46.61	148 40.45	L	200		NE	C/I,R	В	R	W-0	3.0 A41	
	Map-13	Barry Arm Anchorage		148 10.35	L	1750	М		R	В	М	W-31.5	14 A47	
		-												

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A49	Map-14	Unakwik Inlet-Siwash Bay Anchorage	60 57.90	147 36.32	L	2000	М	N,S	CF,R,AQ	В	I	W-43.3,V-48.8	20.5 M39	
A50	Map-14	North Unakwik Inlet Anchorage	61 00.63	147 31.84	L	650	М	N,S	CF,R,AQ	В	I	W-45.5,V-50.3	23 M39	
A51	Map-15	Heather Bay Anchorage	60 59.02	147 00.15	L	1650	М	SE	R,CF	В	R	T-16,V-34	6.5 D52	
A53		Okalee Channel Anchorage	60 03.36	144 23.92	L	1150	Н	W	CF,R	B,G	H,I	C- 62	4.4 A54	
A54		Kayak Entrance Anchorage		144 24.91	L	2700	Н	W	CF,R	B,G	R	C- 64	4.4 A53	
		te list of Potential Places of Ref			DRAFT		sized v			Gross 1	Tons			
A02		Anderson Bay Anchorage	61 04.83	146 33.84	5	1200	М	N,E,W	R,AQ	B,G	I	V-6.5	4.0 A01	
A17	Map-03	South Bligh Island Anchorage	60 47.68	146 48.46	S	1500	M,S	S,SW,SE	S,AQ	G	М	T-6.6	6.3 A16	
D18	Map-03	Tatitlek Ferry Dock	60 51.69	146 41.06	S	513		S	R,S,CF,AQ	B,G	H,R	T-0	0.8 A16	
A40	Map-12	Shotgun Cove Anchorage	60 47.76	148 33.01	S	700	М	N	R,A	В	R	W-5.7	2.4 A41	
A58	Map-15	Chamberlain Bay Anchorage	60 52.55	147 11.19	S	600	М		R	В		T-19.5, V-32	6.5 A51	
An i	ncomple	te list of Potential Grounding Si	tes											
G55	Map-01	Lowe River mud flats	61 05.48	146 16.30	N/A	N/A	M,G	S,W,E	R,SF,S,AQ	B,G	R	V-3.0	1.4 M12	
G56	Map-01	Gold Creek	61 07.76	146 28.02	N/A	N/A	S	S,W,E	R,SF,S,AQ	B,G	R	V-2.75	2.7 A04	
G57	Map-01	Saw Mill Spit	61 05.13	146 25.89	N/A	N/A	S,G	N,E,W	R,SF,S,C/I,AQ	B,G	I	V-3.0	0.7 A08	
G58	Map-01	Old Valdez Town Site	61 06.94	146 16.63	N/A	N/A	M,G	S,W,E	R,C/I,AQ	B,G	I	V-2.25	0.5 M12	
G59	Map-02	North Side of Jack Bay	61 02.42	146 35.47	N/A	N/A	S,G	E	S,CF,A,SF,R	B,G	H,I	V-12.5, T-13.7	6.4 A02	
G60		Sac Bay/North of Galena Bay	60 58.79	146 42.46	N/A	N/A	S,G	E	R,AQ	В	I	V-15,T-9.5	5.4 A13	
G61	Map-04	Red Head	60 40.68	146 28.32	N/A	N/A	M,G	S	C/I	В	I	T-20	3.0 A21	
G62	Map-11	Outside Bay	60 37.81	147 27.87	N/A	N/A	M.G	W	CF	B,G	H,R	W-37, V-47,T-31	7.0 A36	
G63	Map-07	Port Etches	60 19.46	146 34.14	N/A	N/A	S,G	W	S,CF,R	B,G	H,M	C-49	12.5 A29	
G65	Map-13	Point Pakenham	61 00.01	148 04.01	N/A	N/A	M,G	S,W,E	A,SF,CF,R		М	W-27.8	5.25 A47	
G66		Coghill Point	61 03.66	147 55.74	N/A	N/A	M,G	S	A,SF,CF,R	В	М	W-33.3	0.5 A47	
G67		Head of Passage Canal	60 46.62	148 42.84	N/A	N/A	G	NE	SF,CF,R	В	М	W-0	0.5 D43	
		hwest Alaska Pilots Association, teleconfer						•						
Refer	ence: Geog	a Department of Environmental Conserva rraphic Resource Database, Alyeska Pipelir 5, Prince William Sound Marine Firefighting	ne Service Co	ompany, Appl	ied Scie	ence Assoc	ciates, SI			ix, Febru	ary 20,	2004		

Size of Vessels	Swing Room	Bottom Type	Exposure	Conflicting Uses	Ability to Boom/ GRS	Sensitive Resources	Distance to Population Center
D = A deep draft vessel that exceed 20,000 Gross Tons, has drafts of 25-60 ft. and range from 450 ft 1000 ft. LOA, typical of Tankers/Cruiseships	Distance measured to nearest shoal waters or hazard	M= Mud	Exposed to winds/seas from the direction noted	CF=Commercial Fishing	B=able to boom the vessel at the location	R=Report Cultural Resources if discovered during operations to FOSC Historic Properties Specialist.	V=Valdez
L = A light draft vessels of 300 to 19,999 Gross Tons, has drafts up to 25 ft., LOA of up to 450 ft., typical of Ferrys/Trampers		R= Rocky		SF=Sport fishing	G= Geographic Response Strategy in the immediate area	I=The segment should be inspected by FOSC Historic Properties Specialist prior to or concurrent with operations.	C=Cordova
S = A shallow draft vessel less than 300 Gross Tons, has a draft less than 15 ft., LOA less than 200 ft., typical of Excursion/Fishing vessels		G= Gravel		AQ= Aquaculture		M=Sensitive Cultural Resources are known to be present and FOSC Historic Properties Specialist monitor should be present during operations.	W=Whittier
		C= Clay		R=Recreational		E= Threatened or Endangered Species present	T=Tatitlik
		S= Sand		C/I=Commercial/ Industrial		H=Highly Sensitive as designated by the PWS GRS Workgroup(see Section G)	Ch=Chenga
		H= Hard		A= Anchorage			
		SH=Shells		S=Subsistence Activities			

### WHO TO CONTACT FOR INPUT

Comments and recommendations on these PPOR are welcomed. Please send your comments to either of the following agencies:

Alaska Department of Environmental Conservation Prevention and Emergency Response Program 555 Cordova Street Anchorage, AK 99501

United States Coast Guard Captain of the Port, Prince William Sound Marine Safety Office (MSO) Valdez PO Box 486 Valdez AK 99686

# 9760 - Environmental, Fish and Wildlife Protection Plans

Reference the Wildlife Protection Guidelines for Alaska, compiled by the Alaska Regional Response Team, Wildlife Protection Committee at the following link:

http://dec.alaska.gov/spar/PPR/plans/uc/Annex%20G%20(Oct%202012).pdf

# 9770 - Hazardous Substance References

Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substance Discharges/Releases (RCP) Change 3 January 2010, Alaska Regional Response Team, 2010 (as amended).

<u>1998 Statewide Hazardous Material Inventory</u>, Hart Crowser, 1999. Prepared for Alaska Department of Environmental Conservation, Division of Spill Prevention and Response.

<u>Alaska Level A and B Hazardous Material Response Resources</u>, Hart Crowser, 1999. Prepared for Alaska Department of Environmental Conservation, Division of Spill Prevention and Response.

<u>Evaluation of Chemical Threats to the Alaska Public, HartCrowser</u>, 2000. Prepared for Alaska Department of Environmental Conservation, Division of Spill Prevention and Response.

Alaska Statewide Oil and Hazardous Substance Inventory for Reporting Year 2011, Ecology and Environment. Prepared for U.S. Environmental Protection Agency, Region 10.

<u>Statewide Hazardous Materials Commodity Flow Study</u>, Nuka Research and Planning Group, 2010. Prepared for the Alaska Department of Environmental Conservation and the Alaska Department of Military and Veterans Affairs. <a href="http://dec.alaska.gov/spar/perp/hazmat/study.html">http://dec.alaska.gov/spar/perp/hazmat/study.html</a>

9800 - RESERVED

9900 - RESERVED FOR AREA/DISTRICT

#### **GLOSSARY**

#### ABBREVIATIONS and ACRONYMS

ACS Alaska Clean Seas (North Slope industry cooperative)
ADEC Alaska Department of Environmental Conservation
ADF&G Alaska Department of Fish and Game, also as ADFG

ADNR Alaska Department of Natural Resources

ADOT&PF Alaska Department of Transportation and Public Facilities; also as ADOTPF

AFB Air Force Base

ANS or ANSC Alaska North Slope crude oil
APSC Alyeska Pipeline Service Company

ARRT Alaska Regional Response Team; also as AKRRT

BBLS Barrels

BLM US Bureau of Land Management

BOA Basic Ordering Agreement (for federal contractors)

CART Central Alaska Response Team (ADEC)
CCGD 17 Commander, Coast Guard District 17

CISPRI Cook Inlet Spill Prevention and Response Inc. (industry cooperative)

COTP Captain of the Port (USCG)
CTAG Cultural Technical Advisory Group
DOA US Department of Agriculture
DOC US Department of Commerce
DOD US Department of Defense
DOI US Department of the Interior

DRAT District Response Advisory Team (USCG)

DRG District Response Group (USCG)

EPA Environmental Protection Agency; also as USEPA

ESC Executive Steering Committee

ESI (Alaskan) Environmental Sensitivity Index

F/V Fishing Vessel

FAA Federal Aviation Administration
FOSC Federal On-Scene Coordinator
GIS Geographic Information System
GRS Geographic Response Strategies
GSA General Services Administration
HAZMAT Hazardous Materials; also as hazmat

HAZWOPER Hazardous Waste Operations and Emergency Response

IC Incident Commander
ICS Incident Command System

IDLH Immediate Danger to Life and Health

INMARSAT International Maritime Satellite Organization

JPO Joint Pipeline Office (gov't agencies involved with managing/regulating TAPS)

LEPC Local Emergency Planning Committee
LEPD Local Emergency Planning District
LOSC Local On-Scene Coordinator

LNG Liquefied Natural Gas

M/V Motor Vessel

MLT Municipal Lands Trustee Program

MOA Memoranda of Agreement, or Municipality of Anchorage

MOU Memoranda of Understanding MSO Marine Safety Office (USCG)

MSRC Marine Spill Response Corp. (national industry cooperative)

M/V Motor Vessel

NART Northern Alaska Response Team (ADEC)

NCP National Contingency Plan

NIMS National Incident Management System

NIST National Institute of Standards and Technology

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration
NOTAMS Notice to All Mariners; also, Notice to Airmen
NPDES National Pollution Discharge Elimination System

NPFC National Pollution Fund Center
NRC National Response Center
NRP National Response Plan
NRT National Response Team

NRDA (Federal/State) Natural Resource Damage Assessment

NSF National Strike Force

NSFCC National Strike Force Coordinating Center

NWR NOAA Weather Radio

OHMSETT Oil and Hazardous Material Simulated Environment Test Tank

Oil Pollution Act of 1990 OPA 90 **OPCEN Operations Center** OSC **On-Scene Coordinator OSRO** Oil Spill Response Office PIAT Public Information Assist Team **Public Information Officer** PIO **POLREP** Pollution Report (USCG) **PPOR** Potential Places of Refuge **PWS** Prince William Sound

RCAC Regional Citizens Advisory Council

RCRA Resource Conservation and Recovery Act of 1978

RP Responsible Party

RSC Regional Stakeholder Committee

RV Recreational Vehicle
SAC Area Committee
SCP Area Contingency Plan

SART Southeast Alaska Response Team (ADEC)
SCBA Self-Contained Breathing Apparatus

SERVS Ship Escort Response Vessel Service (for Alyeska terminal in Valdez)

SHPO State Historic Preservation Officer (ADNR)

SITREP Situation Report (ADEC)
SONS Spill of National Significance
SOSC State-On Scene Coordinator

SSC Scientific Support Coordinator (NOAA)

SUPSALV U.S. Navy Supervisor of Salvage, also as NAVSUPSALV

TAPS Trans Alaska Pipeline System

T/V Tank Vessel

USCG United States Coast Guard

VIRS Visual Information Response System VMT Valdez Marine Terminal (APSC)

VTS Vessel Traffic Separation System/Scheme

WG Work Group