

# ALEUTIANS SUBAREA CONTINGENCY PLAN

## GEOGRAPHIC RESPONSE STRATEGIES SECTION

<b>GEOGRAPHIC RESPONSE STRATEGIES: PART ONE - INTRODUCTION .....</b>	<b>G-1</b>
A. PURPOSE AND SCOPE .....	G-1
B. HOW TO USE THESE GEOGRAPHIC RESPONSE STRATEGIES.....	G-2
C. WHO TO CONTACT FOR INPUT.....	G-2
D. HOW THE DOCUMENT WAS DEVELOPED.....	G-2
<b>GEOGRAPHIC RESPONSE STRATEGIES: PART TWO - GENERAL PROTECTION/RECOVERY TACTICS .....</b>	<b>G-2</b>
<b>GEOGRAPHIC RESPONSE STRATEGIES: PART THREE - SITE-SPECIFIC GEOGRAPHIC RESPONSE STRATEGIES .....</b>	<b>G-3</b>
A. ALEUTIANS EAST A RESPONSE ZONE.....	G-4
B. ALEUTIANS EAST B RESPONSE ZONE.....	G-5
C. ALEUTIANS WEST A RESPONSE ZONE.....	G-6
D. ALEUTIANS WEST B RESPONSE ZONE.....	G-7
E. PRIBILOF ISLAND ZONE.....	G-8
F. ALEUTIANS SEAFOOD PROCESSOR PROTECTION PLANS.....	G-9
<b>GEOGRAPHIC RESPONSE STRATEGIES: PART FOUR - REFERENCES.....</b>	<b>G-10</b>
A. SENSITIVE AREAS .....	G-10
B. LAND OWNERSHIP.....	G-10
C. EQUIPMENT & TECHNIQUES .....	G-10
D. GIS DATABASES .....	G-11

The following pages are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/home.htm>. Any new GRS's will be added to the above website as they are approved and available.

# **GEOGRAPHIC RESPONSE STRATEGIES: PART ONE - INTRODUCTION**

The GRS Introduction pages are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/home.htm>.

## **A. PURPOSE AND SCOPE**

These Geographic Response Strategies (GRS) are designed to be a supplement to the Aleutians (PWS) Subarea Contingency Plan for Oil and Hazardous Substances Spills and Releases, commonly referred to as the PWS Subarea 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 Captain of the Port for Western Alaska 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.

## **B. HOW TO USE THESE GEOGRAPHIC RESPONSE STRATEGIES**

The information provided here supplements information provided in the Aleutians SCP and the Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substances Discharge/Releases (commonly referred to as the Unified Plan). 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.

The GRS contain basic protection and recovery strategies with directions for implementation in the field. Each description contains the strategy objective, deployment depictions, resource sets required to implement the strategy, and deployment considerations and limitations. These general strategies may be adapted to produce a protection scheme for any site in the Aleutian Subarea. The strategies are taken from the State of Alaska's oil spill response tactics guide, *Spill Tactics for Alaska Responders* (STAR Manual). Responders should use refer to the STAR Manual for more detailed information about the GRS tactics.

The STAR manual, published by ADEC, is available online at:  
<http://www.dec.state.ak.us/spar/perp/star/docs.htm>.

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.

## **C. 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, Western Alaska  
PO Box 5800  
JBER, AK 99505-0800

## **D. HOW THE DOCUMENT WAS DEVELOPED**

These GRS were developed through a cooperative, workgroup 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. Workgroups were (or will be) formed for each response zone in the subarea.

Workgroup participants identified all sensitive areas with potential to be classified as "Areas of Major

Concern” under the criteria established in the Aleutian Subarea 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 workgroup 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 workgroup made the final site selections for the zone. Additional sites may be selected in the future.

An Aleutian Tactics committee, composed of spill response professionals and personnel from natural resource agencies, was formed to develop draft strategies for each site selected. The draft strategies were reviewed and approved by the entire workgroup and the final draft was forwarded to the Aleutian Subarea Committee with the recommendation that it be adopted as part of the Aleutian SCP.

### **1. ALEUTIANS GRS WORKGROUP**

The Aleutian Workgroup consisted of representatives from the following organizations:

Alaska Department of Environmental Conservation	The City of Akutan
Alaska Department of Fish and Game	The City of Unalaska
Alaska Department of Natural Resources	National Marine Fisheries Service
Alaska Chadux Corporation	National Oceanic and Atmospheric Administration
Alaska Marine Pilots	National Park Service
Aleutian East Borough	United States Coast Guard
Aleut Marine Mammal Commission	United States Department of the Interior
	United States Fish and Wildlife Service

## **GEOGRAPHIC RESPONSE STRATEGIES: PART TWO - GENERAL PROTECTION/RECOVERY TACTICS**

The GRS General Protection/Recovery Tactics are available on the ADEC Website at

<http://www.dec.state.ak.us/spar/perp/star/docs.htm>

**GEOGRAPHIC RESPONSE STRATEGIES: PART THREE - SITE-SPECIFIC  
GEOGRAPHIC RESPONSE STRATEGIES**

The GRS Site Specific Response Strategies Introductory Text and Index Maps are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/home.htm>.

**A. ALEUTIANS EAST A RESPONSE ZONE**

**Nelson Lagoon ..... Map AEA-01**

.....

Stepovak Bay..... Map AEA-02

Orzinski Bay..... Map AEA-03

Albatross Anchorage..... Map AEA-04

Lefthand Bay ... Map AEA-05

Sand Point..... Map AEA-06

Red Cove Stream ..... Map AEA-07

Baralof Bay ..... Map AEA-08

Zachary Bay ..... Map AEA-09

Belkofski Bay ... Map AEA-10

Deer Island ..... Map AEA-11

King Cove Lagoon ..... Map AEA-12

Thinpoint Cove ..... Map AEA-13

Mortensens & Old Man Lagoon..... Map AEA-14

Russell Creek ... Map AEA-15

Kinzarof Lagoon ..... Map AEA-16

Big Lagoon-Morzhovoi Bay ..... Map AEA-17

Izembek Lagoon-West ..... Map AEA-18

Izembek Lagoon-East ..... Map AEA-19

Port Moller ..... Map AEA-20

Bear River ..... Map AEA-21

Cape Seniavin .. Map AEA-22

The Aleutians East A Response Zone GRS are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/zoneea.htm>

**B. ALEUTIANS EAST B RESPONSE ZONE**

Ugamak & Aiktak Islands ..... Map AEB-01  
Lost Harbor, Surf Bay-Akun Island ..... Map AEB-02  
Akutan Island .. ..... Map AEB-03  
Hot Springs Bay/Open Bight ..... Map AEB-04  
Unalga & Baby Islands..... Map AEB-05  
Kashega Bay (Selendang Ayu Deployment) ..... Map AEB-06  
Pumicestone Bay (Selendang Ayu Deployment) ..... Map AEB-07  
Skan Bay (Selendang Ayu Deployment) ..... Map AEB-08  
Mouth of Makushin Bay (Selendang Ayu Deployment) ..... Map AEB-09  
Head of Makushin Bay (Selendang Ayu Deployment) ..... Map AEB-10  
Volcano Bay (Selendang Ayu Deployment) ..... Map AEB-11  
Reese Bay/Cape Wislow ..... Map AEB-12  
Broad Bay/Wide Bay ..... Map AEB-13  
Nateekin Bay ... ..... Map AEB-14  
Head of Captains Bay ..... Map AEB-15  
Pyramid Creek & Obernoi Point ..... Map AEB-16  
Iliuliuk River ..... Map AEB-17  
Hog Island ..... Map AEB-18  
Summer Bay ..... Map AEB-19  
Nikolski Bay ..... Map AEB-20

The Aleutians East B Response Zone GRS are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/pws/zoneeb.htm>.



**C. ALEUTIANS WEST A RESPONSE ZONE**

Kagamil Island ..	Map AWA-01
Amilia Island NW .....	Map AWA-02
Amilia Island SW .....	Map AWA-03
Nazan Bay Atka .....	Map AWA-04
North Cape to Cape Korovin .....	Map AWA-05
Korovin Bay North.....	Map AWA-06
Korovin Bay South.....	Map AWA-07
Kagalaska Island North .....	Map AWA-08
North Kagalaska Strait .....	Map AWA-09
Bay of Islands ... ..	Map AWA-10
Shagak Bay .....	Map AWA-11
Kuluk Bay Sweeper Cove .....	Map AWA-12
Finger Bay .....	Map AWA-13
Scabbard Bay ... ..	Map AWA-14

The Aleutians West A Response Zone GRS are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/pws/zonewa.htm>.

**D. ALEUTIANS WEST B RESPONSE ZONE**

Kiska Harbor.....	Map AWB-01
Sarana Bay.....	Map AWB-02
Holtz Bay .....	Map AWB-03
Abraham Bay.....	Map AWB-04
Massacre Bay ...	Map AWB-05

The Aleutians West B Response Zone GRS are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/pws/zonewb.htm>.

E. **PRIBILOF ISLAND ZONE**

The Pribilof Island Zone GRS are under development. The candidate sites are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/zonepi.htm>

**F. ALEUTIANS SEAFOOD PROCESSOR PROTECTION PLANS**

Dutch Harbor Processors ..... Map AK PPP-01  
Iliuliuk Harbor, East Entrance ..... Map AK PPP-02  
Iliuliuk Harbor, Southern Entrance ..... Map AK PPP-03  
Westward Seafoods ..... Map AK PPP-04  
Trident Seafoods, Akutan ..... Map AK-PPP-05

The Seafood Processor Protection Plans are available on the ADEC Website at <http://dec.alaska.gov/spar/perp/grs/ai/ppp.htm>

## **GEOGRAPHIC RESPONSE STRATEGIES: PART FOUR - REFERENCES**

### **A. SENSITIVE AREAS**

The Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases, Unified Plan Volume 1, May 1994 ..... ADEC, USCG, EPA  
State of Alaska Game Refuges, Critical Habitat Areas and Game Sanctuaries, 1991 .....ADF&G  
Gulf of Alaska: Physical Environment and Biological Resources, 1986 ..... Hood and Zimmerman (eds)  
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  
A Working Guide to the Sensitive Plants of the Alaska Region, 1994 ..... US Forest Service  
Tidal Current Tables: Pacific Coast of North America and Asia (Current year's edition).....US Department of Commerce

### **B. LAND OWNERSHIP**

Aleutians Area Plan for State lands at <http://www.dnr.state.ak.us/mlw/planning/areaplans/prince/indexcfm> ..... ADNR  
Property maps at <http://quadpicker.landrecords.info/> .....Alaska Geospacial Data Center, Anchorage

### **C. EQUIPMENT & TECHNIQUES**

Mechanical Protection Guidelines, June 1994 .....NOAA, USCG  
Field Guide for Oil Spill Response in Arctic Waters, 1998, at <http://www.arctic-council.org/flguide/> ..... Arctic Council  
International Oil Spill Control Directory, 19th Edition, 1999-2000 ..... Cutter Information Corp  
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, December 28, 1995 ..... US Coast Guard  
World Catalog of Oil Spill Response Products, 1998/1999 ..... Robert Schulze

**D. GIS DATABASES**

Alaska Department of Natural Resources .....Alaska Geospacial Data Center, Anchorage  
National Oceanic and Atmospheric Administration .....John Whitney, Anchorage  
National Park Service .....George Dickison, Anchorage  
US Fish and Wildlife Service ..... Catherine Berg, Anchorage  
US Forest Service ..... Paula Smith or Karin Preston, Anchorage