Oil Discharge Prevention and Contingency Plan

Tank Vessel

Petro 49, Inc.

ADEC Plan 25-CP-5235

September 2025

Prepared for:

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Alaska Chadux Network
2347 Azurite Court
Anchorage, AK 99507

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Appendices

Table 1.2-2 Other Emergency Notifications

Name	Phone No.
Seward	
Seward Harbormaster	907-224-3138
Local Emergency Planning Committee (LEPC) Kenai	907-262-4910
City of Seward	907- 224-3331
Seward Community Health Center	907-224-2273
USCG Marine Safety Detachment (MSD) Homer	907-235-3292
National Weather Service	907-266-5105
State Emergency Response Coordinator	907-428-7000
Alaska Division of Homeland Security/Emergency Management	907-428-7000
Alaska Regional Hospital	907-276-1131
South Peninsula Hospital	907-235-1801
Additional Emergency Contacts	
Kirk Leadbetter, Marsh USA (Insurance Broker)	907-276-5617 907-276-6292 (fax)
Republic Services	907-258-1558
Wildlife Response and Resources	
Alaska Department of Fish and Game (ADF&G) – Southcentral Alaska Region	907-267-2805 907-267-2342 (alternate)
ADF&G: Southeast Alaska Region	907-465-4105 907-465-6384 (alternate)
National Marine Fisheries Service (NMFS)	907-957-8147 (primary) 323-366-9150 (alternate)
US Fish & Wildlife Service (USFWS)	907-242-6893 (24-hr)

Table 1.2-3 Personnel and Response Team Emergency Contacts

Name	Number	Responsibility
Skagway		
Tim Cochran	907-983-2259 (Work) 907-612-0049 (Cell)	Initial Incident Commander (IC), Plant Manager
Joseph Hosford	907-983-2259 (Work) 907-612-0680 (Cell)	Skiff Operator
Kenneth C. Mayo IV	907-983-2259 (Work) 907-612-0268 (Cell)	Communication/ Responder
Will Godbey	907-983-2259 (Work) 907-612-0309 (Cell)	Skimmer Operator
Brandon Lawrence	907-983-2259 (Work) 503-442-6916 (Cell)	Boom Deployment
On-call operator	612-0049	On-call Operator

Table 1.2-3 Personnel and Response Team Emergency Contacts

Name	Number	Responsibility
Seward		
Kenneth Moore	907-224-8040	Terminal Manager/ Initial Incident Commander (IC) and Safety Officer
Bob Lechner	907-224-8040 (Work), 907-224-1681 (Cell)	Marine OPS Manager/ Alternate Initial Incident Commander (IC) and Safety Officer
Dave Smith	907-224-8040	Skiff Operator, Boom Deployment
Jon Gerlach	907-831-6631	Skiff Operator, Boom Deployment
Ted DeWitt	907-224-8040 (Work) 907- 362-1673 (Cell)	Boom Deployment
Vladimir Stosic	907-224-8040	Boom Deployment
Lona Noyes	907-224-8040	Boom Deployment
North Backus	907-224-8040	Boom Deployment
24-hour Dispatch	907- 362-1674	

Table 1.2-4 State and Federal Agency Notifications

Area of Responsibility	Agency/Address	Contact(s)
General Oversight, Alaska Regional Response Team (ARRT)	U.S. Dept. of the Interior 3801 Centerpoint Dr., Ste. 400-500 Anchorage, AK 99503	Regional Environmental Officer 907-227-3783
Migratory Birds[1], Bald & Golden Eagles, Marine Mammals (including sea otters, walruses, polar bears)[1], National Wildlife Refuges	U.S. Fish and Wildlife Service (USFWS) 1011 E. Tudor Road Anchorage, AK 99506	USFWS Regional Spill Response Coordinator 907-242-6893 (24 hour) Email: fwsakspillresponse@fws.gov
Marine Mammals (including whales, porpoises, seals and sea lions) [1]	National Marine Fisheries Services (NMFS) Federal Building, Room 453 222 W. 7th Avenue, #43 Anchorage, AK 99513-7577	Sadie Wright (Juneau) 907-957-8147 (work)
General Oversight[1], Migratory Birds Terrestrial Mammals, Fish Habitat Permit[2]	Alaska Dept. of Fish & Game (ADF&G) 333 Raspberry Road Anchorage, AK 99518	907-267-2805 (work) 907-267-2342 (alternate)
Temporary waste and oil storage sites, construction, transporting contaminated soils, & burning waste[3]	Alaska Dept. of Environmental Conservation (ADEC) 410 Willoughby Ave., Ste. 303 Juneau, AK. 99811	907-269-7510 (Anchorage) 1-800-478-9300 (24 hour)
State-owned lands and interests[4]	Alaska Dept. of Natural Resources (DNR) Div. of Mining, Land and Water Statewide Abatement of Impaired Land (SAIL) Section	907-465-3513 Email: dnr.sero.spill@alaska.gov dnr.scro.spill@alaska.gov
Historic, cultural, or archeology sites[5]	Alaska Department of Natural Resources Office of History and Archeology (DNR-OHA) 550 West 7th Ave. Suite 1310 Anchorage, AK 99501	907-269-8700
NOAA trajectory projections	National Oceanic Atmospheric Administration (NOAA) 49000 Army Guard Rd., Ste. G216 JBER, AK 99505	907-428-4143

[1] See table 1.2-6 for permits and authorizations.

[2] Onshore activities involving a fish stream require ADF&G permitting. Title 16 fish habitat permit is required to boom the mouth of a fish stream or for other activities in a fish habitat.

[3] Approval is required for temporary waste & oil storage sites, transporting contaminated soils, and burning waste.

[4] DNR requires a permit for activities that exceed the Generally Allowed Uses of State Land described in 11 AAC 96.20.

[5] DNR-OHA requires a permit for work on historic archeological sites on State land. Contact the State Archaeologist. See Appendix B for Alaska Cultural Resources Permit Application.

All petroleum discharges while underway will be reported as soon as possible to the Vessel Master who will become the Initial Incident Commander. P49 Plant Managers will assume the role of Initial Incident Commander for any oil spills at the dock.

The Initial IC will initiate the response in accordance with the Emergency Action Checklist in Section 1.1. The IC will notify all required federal, state, and local agencies as detailed in Section 1.2. The NRC will be notified if a spill is to navigable water or adjoining shorelines or threatens to contaminate water. Immediate response actions will begin while the reporting is being carried out. The IC is responsible for keeping a log of events, communications, and instructions received from agencies concerning a discharge.

Section 1.2.1 Qualified Individuals *18AAC 75.449(a)(2)*

Duties and Authorities

QI and alternates meet the USCG requirements of 33 CFR 154.1026. The QI is responsible for the following:

- Make all agency notifications in accordance with the agency spill reporting requirements.
- Make other agency notifications as applicable.
- Complete and submit reporting documentation to applicable agencies.
- Activate PRAC, if necessary.

The CEO of P49 vests in the QI's authority to implement this plan as required in the citations above. The USCG requirements include authority to activate contracting resources, act as liaison with federal and state on-scene coordinators, and commit the funds necessary to conduct a response.

Table 1.2-5 P49 Qualified Individuals

Location	Name	Office	Cell Phone
All Locations	Matthew Lindsey	907-224-3190	907-250-5935
Skagway	David Simmerman	907-865-2325	907-315-6276
Seward	Russell Cooper	907-865-2309	907-267-9167

Section 1.2.2 Permits

Even if a permit were not required, it might be necessary to get the agency's permission for access. See Table 1.2-3 for state and federal contacts that would issue permits for activities related to oil spill cleanup. See Table 1.2-6 for permits required for wildlife response activities during oil spill cleanup activities. See the Alaska Spill Response Permits Tool page for more information on applicable permits (a link to this website is provided in Section 3.11 of this plan).

If federal lands were affected, a land use permit would be required for access. Authorizations required for hazing, capture, or holding injured animals are tabulated on the next page.

Table 1.2-6 State and Federal Permits for Wildlife Response Activities

Activity	Migratory birds	Sea otters, walruses, and polar bears	Whales, porpoises, dolphins, seals, and sea lions	Terrestrial mammals, furbearers, and non-migratory birds	Fish, shellfish, and invertebrates	Bald or golden eagles	Threatened or endangered species[1]
Carcass Collection	USFWS Migratory Bird Salvage Permit & OLE Authorization[2]	USFWS Permit & OLE Authorization[2]	NMFS MMHSRP Permit[3]	ADF&G Wildlife Response Permit	ADF&G Wildlife Response Permit	USFWS Permit & OLE Authorization[2]	NMFS/USFWS ESA section 7 consultation[4] & USFWS OLE Authorization[2]
Haze/Deter	ADF&G Wildlife Response Permit	USFWS MMPA Authorization	NMFS MMHSRP Permit[3]	ADF&G Wildlife Response Permit	N/A	USFWS Eagle Depredation Permit	NMFS/USFWS ESA section 7 consulation[4]
Capture, Transport, Stabilize, or Rehabilitate	USFWS Migratory Bird Rehab Permit	USFWS MMPA section 112(c) LOA	NMFS MMHSRP Permit[3]	ADF&G Wildlife Response Permit	N/A	USFWS Eagle Depredation Permit	NMFS/USFWS ESA section 7 consulation[4]

Acronyms: ADF&G = Alaska Department of Fish and Game; EPA = U.S. Environmental Protection Agency; ESA = Endangered Species; LOA = Letter of Authorization; MMPA = Marine Mammal Protection Act; MMHSRP = Marine Mammal Health and Stranding Response Program (NMFS); NMFS = National Marine Fisheries Service; OLE = Office of Law Enforcement (USFWS); USCG = U.S. Coast Guard; USFWS = U.S. Fish and Wildlife Service

Note: See Initial Emergency Contacts in the WPG for a list of agency personnel to contact for appropriate authorizations and permits.

Source: Table 4-1 in the Wildlife Protection Guidelines for Oil Spill Response in Alaska (ARRT 2020)

[1] An ADF&G permit is required to deter, collect, or hold any species on the state endangered species list that is not on the federal endangered species list.
[2] For species managed by USFWS (i.e., migratory birds, eagles, sea otters, walruses, and polar bears).
[3] Request verbal case-by-case authorization from the NMFS Regional Stranding Program Coordinator or associated co-investigator.
[4] ESA section 7 consultation between federal action agencies (i.e., USCG or EPA) and consulting agencies (USFWS and NMFS).

Section 1.3 Safety *18 AAC 75.449(a)(3)*

The Safety Officer is responsible for preparing a site safety plan based on the assessment of the guidelines discussed below in the initial site safety form located in Appendix C of this plan.

The Safety Officer is responsible for monitoring safety during a spill response and developing measures for protecting the safety of personnel. The Safety Officer will correct unsafe activities or conditions through the regular line of authority, although the Safety Officer has the authority to stop or prevent unsafe acts when immediate action is required.

The individuals identified as Safety Officers for each location of operation are provided below:

Location	Name	Phone Number(s)
Skagway	Tim Cochran, Plant Manager	907-983-2259 (Office) 907-612-0049 (Cell)
Seward	Kenneth Moore, Terminal Manger	907-224-8040 (Office) 907-615-9691 (Cell)
Seward	Bob Lechner (Alt.), Marine Ops. Manager	907-224-8040 (Office) 907-362-1681 (Cell)

Air Monitoring

If the Safety Officer is concerned about the air quality, before allowing people to enter the spill site and begin the response, the air will be checked by the vessel personnel, the responding spill response contractor, or the local fire department. A lower explosive limit (LEL) meter will be used to detect whether an explosive danger exists and whether there is sufficient oxygen present for people to enter safely. If there is a large gasoline spill, the area will be quarantined, and no response will be undertaken until all safety issues are addressed. These include explosive levels, oxygen, and all aromatics such as benzene, toluene, and total hydrocarbons.

Specific duties of the Safety Officer include:

1. Check in at the Incident Command Post and receive briefing from IC.
2. Organize work area.
3. Brief and assign duties to subordinates.
4. Identify hazardous and unsafe situations associated with the spill response.
5. Participate in the planning meetings to identify any health and safety concerns inherent in the Incident Action Plan (IAP).
6. Prepare the safety message for the IAP.
7. Exercise emergency authority to stop or prevent unsafe acts.

Investigate accidents that occur within the spill response area of activities. In developing a site-specific safety plan using the following model, all government safety standards will be followed.

Section 1.5.2 Primary Response Action Contractor Mobilization

18 AAC 75.449(a)(5)(B)

If necessary, the QI will request assistance from the Primary Response Action Contractor (PRAC) under the terms of the contract included in Section 3.7 of this plan. Below is a description of the interim actions to be performed until the PRAC initiates a full response to a discharge. To initiate mobilization of the PRAC, call SEAPRO or Chadux.

Response Contractor:	SEAPRO
Address:	540 Water Street, Suite 201 Ketchikan, Alaska 99901
Phone:	907-247-1117
Response Contractor:	Alaska Chadux Network
Address:	2347 Azurite Court Anchorage, Alaska 99507
Phone:	907-348-3365

When a discharge occurs the Initial IC calls the QI. The Initial IC briefs the QI on the situation. The IC reports any damages and/or injuries and lists the resources and assistance needed to respond. The QI obtains all the information needed to mobilize the requested assistance and the appropriate Spill Management Team. The QI will assist with notification if requested to do so by the IC.

The QI calls SEAPRO or Chadux to request the specific assistance and resources needed. To provide a written record, a resource order is signed by the QI for everything requested. The resource order is emailed or faxed to SEAPRO or Chadux for confirmation of the order, and a copy is faxed to the IC for documentation of what was ordered and when it is expected to arrive at the staging site.

Upon arrival of SEAPRO or Chadux personnel, they will immediately be briefed on the spill and assigned to applicable task forces. Additionally, SEAPRO or Chadux equipment will be staged and deployed where it is needed without interruption of any ongoing response actions.

Details of how the equipment will be transported to the spill site are in the SEAPRO Technical Manual or Chadux Response Manual. SEAPRO or Chadux will mobilize its own resources in accordance with their manual which is by reference a part of this plan (SEAPRO 2022) and (Chadux 2021).

The personnel safety section of this plan deals generally with fires and safety procedures. In general, fire response procedures are:

1. Sound general alarm.
2. Isolate and terminate source of fire (for example, stop fuel transfer).
3. Eliminate all ignition sources.
4. Designated person should:
    a. Notify local fire department via 911
    b. Evacuate personnel from the area of the vessel and account for personnel
    c. Alert vessels in the area if necessary
5. If fire is too large to be extinguished in 15 seconds with the vessel's extinguishing equipment, evacuate the area on the vessel completely and stand off at a safe distance, maintaining control of the vessel if possible.
6. No one may enter a hot zone without authorization.
7. Use non-sparking tools when working in a hot zone.
8. Use intrinsically safe radio equipment in the hot zone.

Related general safety procedures, such as testing areas with explosion meters when there is a potential fire or explosion threat and establishing an exclusion and safety zone at an incident, are also relevant to all facilities and explained in Section 1.3.

If there were a product discharge, particularly if it is a volatile product like gasoline or aviation fuel, electricity would be shut off and ignition sources prevented. This status would remain until it was verified that wind had dissipated any fire hazard in the vicinity of the spill. If appropriate, occupants of downwind structures, and/or marine traffic would also be immediately notified to control any ignition sources.

Section 1.6.3 Surveillance and Tracking *18 AAC 75.449(a)(6)(E)*

Tracking of the discharge will begin immediately. This will allow forecasting of where the discharge will go and which shores and areas may be impacted. During the forecasting, clean-up crews and shoreline protection methods can be determined and put into place. It is important to label and retain plots in sequence, together with the available meteorological and oceanographic data, to permit appropriate review and study.

During the initial actions taken after a discharge, tide and wind information will be gathered and used to determine the direction the discharge will travel. During hours of darkness, this may be the only way to estimate the direction of travel. During daylight hours, the use of marine vessels and aircraft will be the most effective.

Through the contract with SEAPRO, a waterproof drone may be used for aerial surveillance. This is the preferred method for aerial tracking because it is safer and logistically simple to transport to a spill site.

TEMSCO helicopters will provide aerial tracking capabilities through an MOU with SEAPRO. TEMSCO has ensured they have the following aircraft available at the following locations to

meet the oil tracking requirements of 33 CFR § 154.1045(j). Contact information is also provided below.

Description	Asset Type	Quantity	Location
Helicopter	MD 500	8	SE Alaska
Helicopter	AS 350	18	SE Alaska
Helicopter	AS 350 B2	1	SE Alaska

Source: (SEAPRO 2022)

Business Name	Location	Number
TEMSCO Helicopters	Juneau	907-789-9501

Through the contract with Chadux, several drones may be used for aerial surveillance in the Cook Inlet region. This is the preferred method for aerial tracking because it is safer and logistically simple to transport to a spill site.

Alternatively, Clearwater Air can provide aerial tracking capabilities through an MOU with Chadux. Clearwater Air provides fixed wing aerial tracking capabilities for the Cook Inlet region with operations based out of Merrill Field Airport.

Business Name	Location	Number
Clearwater Air	Anchorage	907-274-1705

At the direction of the Unified Command, the USCG will request trajectory projections from the National Oceanic Atmospheric Administration (NOAA). See Table 1.2-4 for NOAA contact information.

See (STAR) Manual Section B-II-2 Discharge Tracking on Water for more information.

Diesel moves downstream with a current at the same speed that the surface waters are moving. Wind will influence the movement of a slick by pushing it or opposing it, depending on current direction, at about three percent of the wind speed. There will be some tendency for the slick to spread laterally as it moves down current due to the tidal, viscous, and surface tension forces at work. As a result, the discharge will assume a “teardrop” shape so that the moving front of the slick will become increasingly wide downstream from the origin of the discharge.

Section 1.6.4 Protection of Environmentally Sensitive Areas

18 AAC 75.449(a)(6)(F)

Tankships are navigating the routes included in Section 1.8 of this plan. Maps depicting sensitive areas and wildlife along the Cook Inlet and Southeast regions, and further discussion of environmentally sensitive areas, are in Section 3.9 of this plan. This includes discussion of sensitive environments and public resources in the region. The Arctic and Western Alaska Area Contingency Plan (ACP) and the Southeast Alaska ACP establishes and ranks sensitive areas and provides information on Geographic Response Strategies (GRSs) in the region. See Section 3.9.3 of this plan for discussion on anadromous streams

in the region. Exclusion and deflection booming tactics will be deployed at any threatened environmentally sensitive areas.

See STAR Manual Sections B-III-12 and B-III-13 for full descriptions of exclusion and deflection booming tactics.

Fisheries, Processors, and Hatcheries

The majority of fisheries and processors are active in the Cook Inlet and Southeast region areas during the summer season only. Their operating times throughout the year can vary. Should one or more of the operating fisheries or processors be threatened in the event of an oil spill, the Vessel Master or designee will notify them so they can turn off their water intake. See Table 1.2-2 for contact information for local fish processors.

Section 1.6.5 Containment and Control Strategies *18 AAC 75.449(a)(6)(G)*

The strategy is to contain the discharge first and to control what oil escapes containment to prevent it from impacting the shore. The most sensitive shorelines will have the highest priority for protection. The least sensitive shorelines may be used for collection and recovery of the oil that escapes initial containment.

On Water

Oil is contained on the water with containment boom. The boom is deployed around the oil. Sorbent boom should be placed inside the curtain boom to improve the effectiveness of the containment. If the slick escapes to open water before it can be contained, different techniques must be used. Boom must be deployed ahead of the slick in an attempt to capture it. An oil slick tends to spread out as it moves and to form a tear drop shape. It will move with the current at the same speed and with the wind at about 3% of the wind speed. STAR Manual Section B-III-2 has further information on the containment boom tactic.

To capture a slick on open water, two vessels are required. One vessel controls each end of the boom which is deployed in front of the slick. The slick can then be captured by pulling the boom up to the slick and closing around it. The slick can then be held in place while a third vessel, with a skimmer or absorbents, recovers the oil; or it can be towed elsewhere for recovery. When sweeping or moving a slick in this manner, boom velocity should be less than one knot, or the slick is liable to escape. Refer to STAR Manual Section B-III-6.

If the slick is not contained before reaching shore, it must be stopped from contaminating critical shores and then trapped against shores where impact would be minimal and cleanup easiest. Exclusion booming techniques are used for protection of critical shores. Where there is a long-shore current, exclusion booming is used. Refer to STAR Manual Sections B-III-12 and B-III-13 for further information on the diversion boom and exclusion boom tactics.

Nearshore

Spills on the water can occur from the dock or vessel during a transfer operation. If no dangerously volatile fuels are handled, the best action is to contain the slick as quickly as

possible in the vicinity of the shore or dock. The general procedure is to use a floating containment boom to encircle the slick. Specific deployment methods depend on the situation. Generally, the containment boom can be attached to a pile at the dock or anchored onshore. The deployment skiff then tows the boom so as to encircle the slick. The second end is then tied to a dock pile or again anchored onshore. Refer to STAR Manual Section B-III-5 for further information.

Geographic Response Strategies

See ADEC's Geographic Response Strategies for further information on specific tactics for identified sensitive areas in the Southeast and Cook Inlet regions (ADEC 2025c).

Section 1.6.6 Recovery Strategies *18 AAC 75.449(a)(6)(H)*

Shorelines

Spills that are not contained on the open water will contaminate the shoreline. The cleanup methods employed will depend on the type of shoreline affected. See Section 1.6.11 Shoreline Cleanup Teams, for detail on shoreline cleanup.

Open Water

To recover oil from water, it must first be contained. If the oil on the water is thick, weir skimmers can be used effectively to recover it. When the oil is in a thin film, it is better to use oleophilic skimmers. The skimmer will be placed in the containment area with the greatest concentration and thickness. Skimming operations will become inefficient when most of the spill has been removed. Sorbent materials will then be used to pick up the remaining oil.

Spills that have not spread over a large area or that have been driven into streamers by the wind and waves may be recovered using booms and skimmers. Small slicks may be successfully skimmed using two booms, 100 to 150 feet each, to concentrate the oil, with a skimmer boat to remove the oil. Streamers or "wind rows" which are the long parallel rows of oil created by wave action can be skimmed using this configuration beginning downwind and moving upwind along the streamer. The relative skimming velocity will not exceed one knot for these cases.

Sorbent materials will be used for small volume spills in calm seas and to pick up small quantities of oil that are difficult to remove with mechanical equipment, such as skimmers and vacuum devices. Sorbent materials can present a recovery problem if they are placed in an area where tidal action, currents or winds cause them to float away. A tether line can be attached to the sorbent materials to aide recovery.

To increase the efficiency of sorbent materials, they will be moved and turned frequently, and caution will be exercised in removing them from the oil-contaminated area so that oil does not drip on to clean surfaces.

Section 1.6.7 Damaged Tank Transfer and Storage *18 AAC 75.449(a)(6)(I)*

In the event of a damaged storage tank and fuel that needs to be removed from the tank, pumps will be used to transfer the fuel to alternate storage. Transfer to alternate storage will be accomplished with available piping or portable pumps and hoses. If a marine vessel is to be used as alternate storage, the transfer will be accomplished with the use of a pipe or hose. Variations to these procedures may be used if circumstances necessitate.

When available, a tank barge will be brought alongside the stricken tanker and made fast to the beam per industry standards and procedures. A safety and transfer briefing will be held between the barge tankermen and the ship's transferring personnel, to include emergency shut down and departure plans. All appropriate and required paperwork will be exchanged. Communication plans will be discussed and communications established. Transfer hoses and equipment will be deployed, and transfer of fuel will be conducted per tanker and lightering barge standard procedures. When the lightering barge is full, the transfer will stop, and all hoses and equipment will be recovered per standard operating procedures. The barge will depart, making room for additional lightering barges if necessary. The process will repeat as necessary until all cargo required by regulatory authorities is removed. The lightering barges will take the lightered product to the appropriate facility and offload to storage tanks ashore.

Section 1.6.8 Transfer and Storage of Recovered Oil *18 AAC 75.449(a)(6)(J)*

The STAR manual marine-based tactics for storage and transfer of recovered liquid (STAR Manual Section B-III-17) are used. The primary storage for recovered liquid is barges and bladders. Full bladders will be rotated with empty ones to minimize interruption of recovery operations.

Estimating the amount of recovered oil can be done by gauging the bladders, barges, and tanks with a hand gauge, or by using visual estimation. The Operations Section Lead is responsible for collecting this data and notifying the Unified Command.

Correct handling of oil and oily debris is imperative to prevent recontamination and to protect unaffected areas.

Anticipated recovered oil/oily water transfer and storage strategies that would be utilized are outlined on the ICS 201s and scenario and task resource matrices later in this section.

Decanting *18 AAC 75.449(a)(6)(L)*

Decanting is a method used to remove water from recovered liquid. Decanting is an option which may be used whenever temporary storage capacity is insufficient to hold all the recovered liquid. Application must be made to ADEC for a permit to operate a decanting system. Appendix B of this plan contains a decanting permit application. No decanting is allowed without an approved permit from the State of Alaska. See Section 3.11 Bibliography of this plan for a link to State of Alaska information on decanting.

Before decanting, the liquid must be allowed to sit for some time (generally 30 minutes) to permit settlement and separation of the oil and water (Ross 1999). Note that a longer settling

time must be allowed because of dynamic forces (wave action) exerted on a barge. Water is then removed from the bottom of the storage container. The water may be drained if the storage container has a bottom drain. Otherwise, the water may be pumped from the bottom of the container through a suction hose inserted through the oil into the water at the bottom of the container. The discharged water should be returned to the recovery area so any oil accidentally discharged will be recovered (Ross 1999).

To determine the amount of water versus oil in a temporary storage container use a method called "sticking the tank." This means sounding the container with a stick or rod with "Kolor Kut" paste (or another similar product) on it. Kolor Kut paste will change color when it comes in contact with water, thereby indicating the level of water in the container. Standard operating procedure is to leave some water in the container to avoid losing any recovered oil. Leaving 20 percent of the water in the container will conservatively prevent oil from being discharged during decanting.

Barge Storage of Recovered Oil

A contracted barge is estimated to arrive at the spill site in Cook Inlet and Southeast regions within 48 hours and would be available for additional temporary storage and oil collection upon arrival in addition to accepting lightered fuel from the damaged tank. Personnel will follow the procedures listed in the barge manuals for internal movement of recovered product. Utilizing the cascading capabilities of the barge tanks, operators will consolidate petroleum product and oily water into separate tanks. If decanting from the barge is desired, an application must be submitted to the Unified Command for decanting consideration. Note that a longer settling time must be allowed for due to dynamic forces (wave action) exerted on a barge.

Section 1.6.9 Temporary Storage and Ultimate Disposal *18 AAC 75.449(a)(6)(K)*

General Discussion

Two types of waste may be generated during a spill response, contaminated solid waste and liquid waste, which is usually a mixture of oil and water. Each tankship operating under this ODPCP will have some temporary storage available onboard. This includes ullages of other tanks and ballast and slop tanks, which can be used immediately without jeopardizing the overall stability of the vessel. PRAC resources such as floating bladders and portable tanks can also be brought to the site and utilized, if needed.

All waste should be quantified and characterized. P49 will contract a waste management contractor to test, classify, and quantify waste. Each container will be labeled to indicate its contents and will be given an identification number for tracking. If approved by the ADEC, recovered liquid will be decanted to reduce the volume of recovered liquid. Any remaining contaminated water or off-spec fuel will be shipped to an approved disposal facility.

Oily debris will be double bagged and placed in dumpsters or shipped to an approved storage site. Contents will be classified and recorded. If any oily liquids have been identified that require off-site disposal, they will be manifested and transported by permitted carrier to the designated disposal site. Should the need arise for disposal off site, the following facilities

have been identified for waste disposal. The approved disposal plan will designate the facility for disposal.

Company	Location	Phone
Capital Disposal	Juneau, AK	907-780-7801
Republic Services	Anchorage, AK	907-258-1558
Alaska Soil Recycling	Anchorage, AK	907-349-3333
Stericycle Environmental	Anchorage, AK	907-272-9007

STAR Manual, B-III-16, B-III-17, and B-III-18 describe procedures for marine based storage and transfer, land-based storage and transfer, and pumping oily liquids, respectively. STAR Manual, A-III-7 additionally provides a waste management checklist.

Section 1.6.10 Wildlife Protection *18 AAC 75.449(a)(6)(M)*

The Vessel Master is responsible for understanding wildlife response tasks and the qualifications necessary to perform the tasks. SEAPRO and Chadux have contracted wildlife response capabilities. The contracted experts can assess the impact on wildlife, obtain permits necessary, and engage in wildlife hazing or rescue and rehabilitation. They have contracts with wildlife responders recognized in Alaska with the capacity to implement primary, secondary, and tertiary response. See Section 3.11 of this plan for a link to the SEAPRO Technical Manual and the Chadux Response Manual for more information on the specific capabilities of each PRAC.

A summary of response tasks concerning wildlife:

Level of Response	Activity
Primary	Keep oil from reaching wildlife or habitat. Prevention of secondary contamination through scavenging of dead and oiled wildlife.
Secondary	Haze wildlife away from contaminated habitat.
Tertiary	Capture and treat contaminated wildlife.

Chadux has contracted wildlife response capability. The contracted experts can assess the impact on wildlife, obtain permits necessary, and engage in wildlife hazing or rescue and rehabilitation. Refer to the Chadux Technical Manual for wildlife response strategies.

Chadux has a contract with International Bird Rescue (IBR). The IBR provides the experts with the training necessary to rescue and rehabilitate birds and some small terrestrial furbearers, not including sea otters. The wildlife expert shall assess the spill in terms of potential impact on wildlife, as well as obtain permits necessary to engage in wildlife hazing or rescue and rehabilitation.

Responders will report whether sea otters, or other marine mammals, are in the area of the spill and, if so, will observe the animals to determine if they were impacted. Chadux also has a contract with the Alaska SeaLife Center in Seward, Alaska. The Alaska SeaLife Center is a National Marine Fisheries Service (NMFS) approved wildlife responder. They have the capability to treat and rehabilitate oiled marine mammals. The Alaska SeaLife Center has the training necessary and the capability to treat and rehabilitate oiled marine mammals. See the

Wildlife Protection and Response section in the Chadux Response Manual for detailed information (see Section 3.11 of this plan for a link to the manual).

The Alaska SeaLife Center is capable, and has the authorization for, working with live or dead individuals of other cetacean species, but the size of the individual may limit the scope of the response. Limitations would vary depending upon the exact size of the individual, the weather conditions, the exact location and accessibility of the individual, the individual's level of activity, the number of people available to assist, the availability of heavy equipment to assist with moving the individual, the availability of appropriate sources of water in which to care for them (i.e. pools, natural lagoons, net pens), and other factors. Additionally, the Alaska SeaLife Center is authorized by NOAA to work with any live or dead individual otariid, phocid, or cetacean not routinely present in the area (C. Arnold [Chief Operating Officer of Alaska SeaLife Center], personal communication, February 25, 2022).

SEAPRO has contracts with the International Bird Rescue (IBR) and International Wildlife Research (IWR). IBR provides wildlife experts with the training necessary to rescue and rehabilitate birds and some small terrestrial furbearers, not including sea otters. IWR is permitted by the USFWS for the response and treatment of sea otters. IWR is capable of responding to marine mammals under NMFS jurisdiction but may only do so with explicit permission from NMFS (R. Davis [President of IWR], personnel communication, June 15, 2025). The wildlife expert shall assess the spill in terms of potential impact on wildlife and obtain permits necessary to engage in wildlife hazing or rescue and rehabilitation.

Responders will report whether sea otters or other marine mammals are in the area of the spill and, if so, will observe the animals to determine if they are impacted. For handling species that are outside of SEAPRO’s contracted ability, SEAPRO has an understanding with IBR that IBR will be responsible for contracting an NMFS-approved wildlife responder.

A specialist from NOAA NMFS will provide oversight and permitting/authorizations for carcass collection, deterrence, and capture of marine mammals under their jurisdiction (NMFS 2017). A specialist from USFWS will provide oversight for any actions that are taken with regards to sea otters, migratory birds, and eagles. ADF&G has permitting responsibility for migratory bird hazing and terrestrial mammal response strategies. NOAAs Pinniped and Cetacean Oil Spill Response Guidelines and the Arctic Marine Mammal Disaster Response Guidelines provide guidance on dealing with marine mammals during a spill response (Ziccardi, et. al. 2015 and NMFS 2017).

Federal and state laws and regulations limit the activities of P49 personnel with respect to handling of all fish and wildlife. Under these laws and regulations, it is illegal for anyone to take or handle wildlife except personnel from the responsible government entities or individuals authorized to take or handle wildlife by the proper authorities. Carcass disposal will not occur without coordination with wildlife agencies.

Plans for protection, recovery, disposal, rehabilitation, and release of wildlife affected by an oil spill are described in and will follow the guidance provided the *Wildlife Protection Guidelines for Oil Spill Response in Alaska* (ARRT 2020). Wildlife Response Plans are addressed in Sections 3650 and 9740.3.8 of the *Wildlife Protection Guidelines for Oil Spill Response in Alaska* (see Section 3.11 of this plan for a link to the Area Plan References and

Tools website). Contracted wildlife experts would be responsible for preparing Wildlife Response Plans and submitting them for agency approval.

Dead, oiled wildlife must be collected and disposed of to prevent secondary contamination of other wildlife. Dead wildlife may only be collected if applicable permits and authorizations have been obtained from the appropriate wildlife agency. The dead wildlife will then be submitted to the appropriate wildlife agency representatives. Disposition of carcasses will be done under their direction. A data sheet for collected dead oiled wildlife can be found in the *Wildlife Protection Guidelines for Oil Spill Response in Alaska* (see Section 3.11 of this plan for a link to the Area References and Tools website).

For wildlife permit contacts, refer to Table 1.2-4 State and Federal Agency Notifications. Authorizations required for hazing, capture, carcass collection, or holding injured animals are tabulated in Table 1.2-6 State and Federal Permits for Wildlife Response Activities.

Section 1.6.11 Shoreline Cleanup Teams *18 AAC 75.449(a)(6)(N)*

The techniques and equipment used for shoreline cleanup will be determined by the Shoreline Cleanup Assessment Technique (SCAT) team. The SCAT team is composed of the NOAA representative in Alaska, State, federal and local government representatives.

Shoreline will be identified by type, sensitivity, and the degree of impact. This information will be obtained from the SCAT team through field inspections that will be conducted at the spill site. The SCAT team will recommend shoreline cleanup strategies and methods. The Unified Command will approve the method to be used in accordance with proper agency approval.

Shoreline cleanup must be coordinated with affected landowners. Permits may be required to enter and to operate on private land.

Only non-invasive manual cleanup techniques and bio-remediation are proposed due to evidence indicating that invasive cleanup operations do more harm than good. Such things as the removal and erosion of beach gravel not only disturb resident life but can hinder recovery.

The primary shoreline cleanup methods SEAPRO and Chadux will use are manual collection. Sorbent boom and sorbent sweeps are good for low impact beach cleaning, and sorbent pads may be used to clean rocky shoreline. Water washing may be used with the sweeps if the Unified Command agrees to its use. The tools required for manual shoreline cleanup are available at the facilities. They include:

- rakes,
- shovels (pointed and flat),
- sorbent booms,
- sorbent sweeps,
- survey stakes,
- barrier tapes,
- pitch forks, and
- plastic bags with wire ties.

A description of shoreline types in the region is provided in Table 3.9-3 Shoreline Type Predicted Oil Behavior.

Section 1.6.12 Spill Scenarios *18 AAC 75.449(a)(6)(A) and (B)*

The spill response scenarios found in this section of the plan were developed in accordance with ADEC regulations, 18 AAC 75.449 and are used to demonstrate the manner in which response actions may unfold during an incident. Two scenarios are presented:

- Scenario 1 – Southeast Alaska Region, Skagway ADEC RPS
- Scenario 2 – Cook Inlet Region, Seward Area ADEC RPS

The response strategy is the plan of action that is the framework P49 follows when responding to an oil spill. This determines the focus of the efforts which are then translated into action through the step-by-step tactics employed.

The strategy for responding to a spill is to stop it, to contain it, and to recover it. Since part of the purpose of containing the spilled product is to prevent it from damaging the environment, P49 has defined the following strategies to govern response to oil spills.

- Stop the source of the spill as soon as possible.
- Contain the spilled product.
- Protect threatened sensitive environments and wildlife.
- Recover product and clean up contaminated areas.

The situation may not always allow the response to step sequentially through these strategies. Although the Incident Commander will be guided by this strategy, logic and judgment will always be relied upon to determine when exceptions are necessary.

For example, usually the product spilled would be diesel fuel, but it is possible that responders face a gasoline spill. In this case, containment would not be correct. Dispersion or evacuation would be safer because of the possibility of explosion and fire.

In case of a diesel spill that was not quickly contained and was threatening wildlife or a sensitive environment, the priority of the response might shift to protecting the threatened environment or wildlife instead of containment.

The Incident Commander is expected to use judgment and to modify the plan to meet the circumstances.

The scenarios provided in this section are not written to be followed in a real spill response. They illustrate hypothetical responses to spills by describing how response resources might be used to respond to imaginary spills. They are not prescriptive. In the case of a real spill, the Unified Command would consult with the agencies having jurisdiction to decide what resources should be protected and what methods should be used.

1. Incident Name Skagway RPS Scenario	2. Prepared By: P49 Date: 09/24 Time: 1000	INCIDENT BRIEFING ICS 201-CG

TF-5 Sensitive area protection resources identified and ordered. Environmental Unit develops ICS232 for protection of priority sites. Exclusion and diversion boom deployed to protect sites identified by TF-6 for potential impact. While on-water (nearshore and open water) are mobilizing to spill location. SEAPRO Haines boom readied for deployment at Skagway River and Dewey Creek.

Waste management plan developed for UC review and approval.

LAP developed for next operational period. TF-7 Shoreline Assessment and TF-8 Wildlife Assessment established for field deployment on Day 2 at 0800.

Night operations: TF-3 to Skagway at 2130 to offload recovered liquids and prepare for deployment at 0500. TF-9 establishes accounting for recovered oily liquids from on-water recovery operations. TF-2 maintains primary containment boom and skimming (end 0:00–D1) at grounded vessel.

DAY 2: TF2, 3, 4A & B continue on-water containment and recovery operations from 0500–1930, as directed by TF-6. Recovery devices rotated to Ore dock facility for offload by TF-9. TF-5 maintains diversion and exclusion boom at sensitive areas.

TF-1, SMFF Provider with equipment arrive Skagway and develop salvage/lightering plan for UC review and approval. Tug with Petro Mariner tug/barge arrives at 1300. SMFF readies lightering equipment (pumps/hose) to begin transfer of remaining product in compromised tanks.

TF-7 develops Shoreline Assessment plan. TF-8 conducts on-water wildlife assessment. IAP developed for next operational period.

TF-8 Wildlife contractors arrive on scene.

At 2100 (+36 hours), the Vessel Master notifies P49 IOSC that the release has stopped.

Day 3: TF2, 3, and 4A&B continue on-water containment and recovery operations from 0500-1930, as directed by TF-6.

Recovery devices rotated to Ore dock for offload by TF-9. TF-5 maintains diversion and exclusion boom at sensitive areas. TF-1, SMFF Provider implements salvage plan. TF-7 implements Shoreline Assessment plan approved by UC. TF-8 conducts on-water wildlife assessment. IAP developed for next operational period. The skimmers used in TF-2 & 3 are demobilized.

Day 4: TF 4A & B continue on-water containment and recovery operations from 0500-1030, as directed by TF-6. Recovery devices rotated to Ore Dock for offload by TF-9. TF-5 maintains diversion and exclusion boom at sensitive areas. TF-1, SMFF Provider implements tow plan to bring the tank vessel into the dock at Skagway. TF-7 implements Shoreline Assessment plan approved by UC. TF-8 conducts on-water wildlife assessment. All oil recovered. IAP developed for next operational period.

Day 5: Shoreline and wildlife assessment continues. Decontamination of demobilized equipment conducted. TF-9 continues waste management and accounting of recovered liquids. UC conducts overflight and inspection of shorelines. UC meeting with community leaders and public.

ICS 232 Skagway RPS Scenario Resources at Risk

1. Incident Name	2. Operational Period (Date/Time)	Resources at Risk Summary
Skagway RPS Scenario	From: 09/24 To: End	ICS 232-OS

3. Environmentally Sensitive Areas and Wildlife Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues
1	1	Skagway River	Anadromous waters; Dolly varden (rearing), coho, chum, chinook, and eulachon are all present.
2	2	Pullen Creek	Anadromous waters; coho, pink, dolly varden, and chum are present.
2	2	Taiya River	(GRS: SE08-02) Area hosts marine mammal habitat, spawning eulachon and salmon habitat, waterfowl and shorebird concentrations. The area is part of a national park and has high recreational use.
4	4	Nelson Creek	Anadromous waters; coho and pink salmon are present in this waterway

Narrative: At the discretion of the IC, the Operations Section Chief, and OSRO additional response tactics may be required to prevent the release from reaching nearby ESAs. Response tactics include dikes, berms, and trenches, containment boom, exclusion boom, and passive recovery with sorbent materials, including snow. See STAR Manual, Sections B-III-2-1, B-III-3-1, B-III-11-1, and B-III-12-1.

Immediately report sightings of oiled wildlife to the IC.

See Sections 1.6 and 3.9 of this plan for more information recovery strategies, containment and control strategies, wildlife protection, and archeo-cultural and socio-economic factors in the region.

4. Archeo-cultural and socio-economic issues

Site #	Priority	Site Name and/or Physical Location	Site Issues
1	1	Port of Skagway	The Port of Skagway is a busy port that provides berthing space and infrastructure for barge services, cruise ships, fishing vessels, etc. Notifications to threatened facilities at the Port may be necessary.
2	2	Taiya Inlet	High recreational use area (June-Nov).
3	3	Residential properties	Numerous residential properties are located along the shoreline.
4	4	Recreational Sites	Various recreational sites are located along the shoreline.

Narrative: Response tactics to prevent a release from impacting on of these sites includes exclusion boom, deflection boom, or a diversion booming site that will impede the flow path from reaching a sensitive area. See STAR Manual, Sections B-III-12, B-III-13, and B-III-8.

Protection prioritization to be conducted by IC and Operations Section Chief in concurrence with the Unified Command.

All responders are instructed to report any cultural resources found during operations to the Federal On Scene Coordinator (FOSC) Historic Properties Specialist (see Section 3.9.4 of this plan for more information).

Prepared by: Environmental Unit Leader	**Date/Time:**

RESOURCES AT RISK SUMMARY **ICS 232-OS**

Night operations: TF-2 towable bladders rotated to SMIC for offload recovered liquids and prepare for deployment at 0500. TF-9 establishes accounting for recovered oily liquids from on-water recovery operations. TF-2 maintains primary containment boom and skimming (end 0:00-D1) at grounded vessel.
Day 2: TF-3 arrives at 0800 and begins skimming operation at 0830. Remains operational for 18 hours. When ORB reaches 90% capacity, the ORB is towed to the SMIC dock for offloading by TF-9 Waste management. When the barge is emptied, it's returned into service. TF-4A (Thumb Cove) & 4B (Humpy Cove) arrive on scene and begin nearshore recovery efforts at 0500. TF-1, SMFF Provider with equipment arrive in Seward and develop salvage/lightering plan for UC review and approval. DBL 54 and Tug arrive on scene at 1000. SMFF readies lightering equipment (pumps/hose) to begin transfer of remaining product in compromised tanks. TF-2 continues on-water containment and recovery operations pumping recovered oil into available tankage on DBL 54 barge. TF-5, Exclusion boom deployed to protect sites identified by TF-6 for potential impact. TF-4A&B continue on-water containment and recovery operations, as directed by TF-6. Recovery devices rotated to SMIC facility for offloading. TF-7 develops Shoreline Assessment plan. TF-8 Wildlife contractors arrive on scene and conduct on-water wildlife assessment. IAP developed for next operational period. At +46 hours, the Vessel master notifies P49 IOSC that the release has stopped.
DAY 3: TF-2, -3 and -4A&B continue on-water containment and recovery operations beginning at 0500, as directed by TF-6. Recovery devices rotated to DBL 54 or SMIC facility for offload by TF-9. TF-5 maintains diversion and exclusion boom at sensitive areas. TF-1, SMFF provider implements salvage plan. TF-7 implements Shoreline Assessment plan approved by UC. TF-8 conducts on-water wildlife assessment. IAP developed for next operational period. TF-2 skimmer demobilized.
DAY 4: TF 3, 4A & B continue on-water containment and recovery operations beginning at 0500, as directed by TF-6. Recovery devices rotated to DBL 59 or SMIC for offload by TF-9. TF-5 maintains diversion and exclusion boom at sensitive areas. TF-1, SMFF Provider implements tow plan to bring the tank vessel into the dock at Seward. TF-7 implements Shoreline Assessment plan approved by UC. TF-8 conducts on-water wildlife assessment. All oil recovered. IAP developed for next operational period
DAY 5: Shoreline and wildlife assessment continues. Decontamination of demobilized equipment conducted. TF-9 continues waste management and accounting of recovered liquids. UC conducts overflight and inspection of shorelines. UC meeting with community leaders and public.

ICS 232 Seward RPS Scenario Resources at Risk

1. Incident Name Seward RPS Scenario	2. Operational Period (Date/Time) From: 10/01 To: End	Resources at Risk Summary ICS 232-OS

3. Environmentally Sensitive Areas and Wildlife Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues
1	1	Thumb Cove	(GRS: SZ-04) Area hosts marine mammal habitat, spawning salmon and herring habitat, waterfowl and shorebird concentrations. The area is habitat for eel grass, fucus, mussels and has high recreational use.
2	2	Humpy Cove	(GRS: SZ-03) Area hosts marsh and sheltered rocky shoreline habitat and spawning salmon and herring habitat. The area has high recreational use and hosts aquaculture sites.
3	3	Eldorado Narrow/ Cape Resurrection	(GRS: SZ-34) Habitat is primarily exposed rocky shore that hosts seals, otters, orcas and seabird nesting.

Narrative: At the discretion of the IC, the Operations Section Chief, and OSRO, additional response tactics may be required to prevent the release from reaching nearby ESAs. Response tactics include dikes, berms, and trenches, containment boom, exclusion boom, and passive recovery with sorbent materials, including snow. See STAR Manual, Sections B-III-2-1, B-III-3-1, B-III-11-1, and B-III-12-1.

Immediately report sightings of oiled wildlife to the IC.

See Sections 1.6 and 3.9 of this plan for more information regarding recovery strategies, containment and control strategies, wildlife protection, and archeo-cultural and socio-economic factors in the region.

4. Archeo-cultural and socio-economic issues

Site #	Priority	Site Name and/or Physical Location	Site Issues
1	1	Thumb Cove State Marine Park	Recreational and private cabins
2	2	Humpy Cove	Private cabins, aquaculture
3	3	Sandspit Point State Marine Park	NE tip of Fox Island; Recreational Site

Narrative: Response tactics to prevent a release from impacting on of these sites includes exclusion boom, deflection boom, or a diversion booming site that will impede the flow path from reaching a sensitive area. See STAR Manual, Sections B-III-12, B-III-13, and B-III-8.

Protection prioritization to be conducted by IC and Operations Section Chief in concurrence with the Unified Command.

All responders are instructed to report any cultural resources found during operations to the Federal on Scene Coordinator (FOSC) Historic Properties Specialist (see Section 3.9.4 of this plan for more information).

Prepared by: Environmental Unit Leader	**Date/Time:**

RESOURCES AT RISK SUMMARY **ICS 232-OS**

6. **Transfer Shutdown Procedures:** The PICs will discuss the procedures to be followed in the case of an emergency as well as those for normal cargo transfer completion.

7. **Discharge Containment Procedures:** The PICs will discuss the deployment and operation of vessel and facility containment and recovery equipment, as well as the role of vessel and facility personnel.

8. **Spill Reporting Procedures:** The PICs will discuss and understand federal, state and local spill reporting requirements and procedures.

9. **DOI:** A DOI will be completed and signed by each of the PICs prior to the commencement of transfer operations. Each successive or relieving person-in-charge must review and sign the DOI prior to assuming responsibility as PIC of the transfer operation.

10. **Watch and Shift Arrangements:** Upon each watch or shift change the PICs will, in addition to familiarizing themselves with and signing the DOI, discuss the transfer procedures with their counterpart prior to changing the watch or shift to ensure each understands the contents thereof.

The cargo transfer procedures are in accordance with 18 AAC 75.025 and detailed in each vessel's Fuel Transfer Procedures. They include, in part, the following:

- Communication: Radio communication between all transfer personnel on shore and on the vessel is verified. Procedures for stopping the transfer are agreed upon.
- Line-up: The PIC on the vessel will set the vessel's tank valves and line block valves in a manner consistent with the requirement of the cargo plan and pre-transfer conference.
- Hook-up: The cargo hose is usually the weakest link in the transfer system. Removing blanks from hoses and headers must be done carefully with drip pans placed under the hose and under each connection. Couplings will be made to meet federal requirements.
- Transfer Pipe Valve Settings: Detailed written procedures and checklists have been established for the dock-to-tank transfer pipe valves. The checklists require that the person operating the valves opens and closes specific valves in accordance with a specific procedure, and that person is required to sign off on each valve operation.
- Initial Transfer: When it is determined that cargo flow to or from the vessel has begun, an inspection will be made to ensure there are no leaks, and all transfer equipment is working properly.
- During all cargo transfer operations there will be at least two (2) deck-watchmen on the vessel, one (1) shoreside tank-watchman, and one (1) dock-watchman on duty at all times. All personnel assisting the operation will be in continuous communication by hand-held radios.
- Upon completion of the transfer, blanks shall be placed on all vessel manifolds using proper methods specific to the vessel.

Section 3.3 Command System *18 AAC 75.451(d)*

Organization of the company's response is based on Incident Command System (ICS) principles. In the event of a spill, response management will be established by P49.

The key roles and structures of the incident command system for oil spills are summarized in this plan. For further detailed descriptions, the following resources contain additional information:

- National Response Framework (FEMA)
- U.S. Coast Guard Incident Management Handbook (IMH)
- Arctic and Western Alaska Area Contingency Plan, Section 2000
- Southeast Alaska Area Contingency Plan, Section 2000
- National Incident Management System (NIMS) Incident Command System (ICS) Forms Booklet (Appendix C of this plan)

Section 3.3.1 Incident Commander and Emergency Response Team

The P49 Plant Manager will act as the initial Incident Commander (IC) for spills at the dock. Refer to Section 1.2 of this plan for personnel and contact information for the Skagway and Seward locations. While underway, the Vessel Master would assume the role of initial Incident Commander. The IC will be able to perform the following duties:

- Activate internal alarms and hazard communication systems to notify all applicable facility personnel;
- Notify all response personnel, as needed;
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;
- Notify and provide necessary information to the appropriate federal, state, and local authorities with designated response roles, including the National Response Center, State Emergency Response Coordinator, and the Location Emergency Planning Committee;
- Assess the interaction of the discharged substance with water and/or other substances stored at the applicable facility and notify response personnel at the scene of that assessment;
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion);
- Assess and implement prompt removal actions to contain and remove the substance released;
- Coordinate rescue and response actions as previously arranged with all response personnel;
- Use authority to immediately access company funding to initiate cleanup activities; and

- Direct cleanup activities until properly relieved of this responsibility.

Section 3.3.2 Incident Command Posts

In the event of an oil spill, an incident command post will be established by P49 for management of the spill.

For any size spill, the forward incident command post will be established at the P49 office(s) in Skagway or Seward, depending on the location of the spill. These locations have telephone and radio communications capabilities (See Section 1.4) and will be utilized to provide operations leadership, supervision, and support.

Section 3.3.3 Incident Command System (ICS) Management Structure

Figure 3.3-1 depicts the ICS structure that will be established and utilized by P49 in a large spill event. It must be noted that the ICS structure is flexible, allowing for expansion, contraction, or modification as warranted and desired.

Precise names, titles, and contact information for each of the ICS roles are provided to ADEC in a separate document. This list is kept up to date and revisions are provided to ADEC on a quarterly basis in accordance with 18 AAC 75.451(d).

The Incident Management Team (IMT) is expected to maintain applicable training. Refer to Section 3.8 and Appendix C of this plan for further details on ICS training for P49 personnel.

Section 3.8 Training and Exercises *18 AAC 75.451(j)*

P49 recognizes that all oil-handling personnel must be trained and kept current in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; and general operations. Records of training will be retained for five years.

The goal is to provide each employee the training necessary to do his or her job effectively and to respond to anticipated emergencies. The training will be designed to provide the necessary skills and knowledge to perform assigned tasks safely and proficiently. The ultimate aim is to protect the health and welfare of the employees and the public and to make sure that service is provided in a professional and competent manner. The training will qualify employees for the following:

- To operate the transfer and loading equipment properly and to prevent spills.
- To understand the purpose, operation, and limitations of all safety equipment so that spills do not occur.
- To be alert to potential hazards and to respond with minimal risk to personal health and safety.
- To be familiar with spill response operations.
- To know proper notification procedures in the event of a spill.

The Vessel Master shall ensure that all onboard training and drills are documented and maintained in accordance with their company training and drills policy. The tankship's company shall ensure that all shore-based required response training is carried out, properly documented, and made available to P49.

Tankships are required to conform to State of Alaska regulations as applicable for training and drills as defined in 18 AAC 75.020. Records are maintained by the vessel's operating company. P49 obtains certification from the tankship's owner/operator during the amendment approval process.

The Plant Manager is responsible for ensuring that every P49 facility employee receives both general and task specific job, safety, health, and environmental training required by federal and state regulations and by this program. Training must be based on the duties and functions to be performed by each person. P49 does not use casual labor nor volunteers for spill response and therefore has no such training program.

The Office Manager is responsible for maintaining records of all training provided to facility employees. These records will include the employee's name, a description of the training received, the date of the training, and who conducted the training. These records should be maintained at the operations office and should be available for inspection. Copies of these records should also be maintained in the employee's personnel file. Three kinds of training will be given to all employees:

- Initial training and employee indoctrination, including prevention training.
- Annual refresher training, including prevention.
- Safety meetings.

Section 3.8.1 Qualifications and Initial Training

The initial training for P49 employees includes four programs:

1. Company/Job Training: This is the training and orientation required of all new employees. It is designed to familiarize the employee with the company policies and procedures. Specific training required to teach each employee his particular job will be included, as well as training in the prevention of oil spills.
2. Incident Command System (ICS): This training is required for all management, supervisory and staff personnel who will participate in controlling response to spills.
3. Hazardous Waste Operations and Emergency Response (HAZWOPER): This is training required for employees who may discover spills or who will supervise or work on emergency response operations.
4. Spill Response: This training consists of deployment exercises conducted in addition to the control and containment training included as part of the HAZWOPER training.

Each employee's training is based on the individual employee's regular duties and on the level of involvement the employee will have in spill response activity. In addition to the employee's regular job duties, each employee will have responsibilities for responding to oil spills and other emergencies. These emergency responsibilities fall into the following categories.

FIRST RESPONDER AWARENESS LEVEL – This training is for employees who are likely to witness or discover a spill but would not take any action beyond notifying the proper authorities. They will be trained to recognize and understand the hazards of any substance spilled. They will know what security measures and additional resources are necessary to respond and whom to notify of the emergency (No specified time requirement - typically four hours annually).

HAZARDOUS MATERIAL TECHNICIAN – Technician level training is for employees who provide initial emergency response to spills. Their function will include containment and control of a spill and may involve working at the point of release to plug, patch, or otherwise stop the flow (24 hours plus eight hours annual refresher).

INCIDENT MANAGEMENT TEAM – IMT members must receive a 24- or 40-hour HAZWOPER training and certification. Training for IMT position duties may be accomplished by participating in spill exercises and drills, resident training courses, attendance during spill events, and other means to maintain expertise in the assigned job position. The command staff shall be knowledgeable in responsibilities of ICS.

INCIDENT COMMANDER – Incident Commanders will take control of the spill site. In addition to the Technician-level training, Incident Commanders must be competent to implement the response plan and generally manage the spill response effort.

QUALIFIED INDIVIDUAL (QI) – The QIs receive the appropriate Incident Management Training, OSHA HAZWOPER, and must receive the level of training equal to 24-hour oil spill responders. Annual HAZWOPER Refresher Training of eight hours must be taken. The QI will have adequate knowledge and sufficient training or experience to demonstrate

competence in implementing this ODPCP, committing resources and obtaining funds during an incident, liaising between Vessel Owner/Operator and the federal and state on-scene coordinators, assessing the need for additional resources, making the appropriate notifications, and supporting contractual arrangements.

Oil Transfer Operations

Vessel procedures for oil loading and transferring operations are designed to prevent oil spills. The transfer procedures are described in detail in the applicable facility operations manual, vessel transfer procedures, and is summarized in Section 3.1 of this plan.

Person-In-Charge – Training for this advanced leadership position of an oil transfer team requires experienced understanding of fuel handling systems and ways to ensure the team is spill prevention-oriented in their work. The Vessel Master (or his designee) keeps an updated list of personnel qualified to act as person-in-charge.

Annual Refresher Training

Employees must annually demonstrate competency in the above areas of training. A record of the method used to demonstrate competency will be maintained. Refresher training must be conducted, as required, to correct any deficiencies discovered.

Safety Meetings

Safety meetings are conducted regularly. Records of the subjects discussed and any actions taken are kept in the minutes of each meeting. These minutes are signed by every employee attending and are filed in the operations office to confirm the training and provide the necessary records.

Section 3.8.2 Evaluating Program Effectiveness

A critical component of the training program is a method of measuring the effectiveness of the training. A plan for evaluating the training should be developed along with the objectives and contents of the training. Methods of evaluating the training include:

1. Trainee opinions: Questionnaires or informal discussions with employees help determine the effectiveness and relevance of the training.
2. Supervisor's observations: By critically observing employees' performance before and after training, a supervisor can determine whether the training has been effective.
3. Improved results: The most important indication of the success of the training is job performance. This can be measured by:
    - Improved work habits.
    - Reduced incidents of spills.
    - Rapid, effective response to emergencies by employees.

Evaluation of the program will indicate to the employer whether additional or modified training is required. If the employees do not demonstrate an understanding of their work and the hazards involved and do not perform acceptably during exercises or actual emergencies, the

training program should be revised. To make revisions that will improve the program, those conducting the training should work with the employees and review the following items.

1. What parts of the training are unnecessary?
2. What material is confusing or poorly understood?
3. What is missing from the program?
4. What material should be more emphasized?

A critical examination followed by implementation of the valid suggestions will improve the program. The process of training, followed by evaluation and implementation of improvements, is a continuing cycle. Such an evolutionary process will ensure that the program is always being improved and updated to provide superior and appropriate training for employees.

Section 3.8.3 Exercise Procedures

Spill response equipment and tactics are regularly drilled in accordance with the National Prevention, Response Exercise Program (PREP), see Appendix B of this plan.

In addition, when there are government initiated regional drills (these occur approximately every three years), P49 personnel participate. All drills and deployment training are recorded on a form located in Appendix B of this plan, which is kept for five years.

ADEC requires a minimum of one operations-based exercise for each five-year renewal cycle of the ODPCP. The exercise must be performed in coordination with ADEC and in accordance with ADEC's Oil Spill Response Exercise Manual. The Oil Spill Response Exercise Manual is based on the doctrine and methodology laid out in the Department of Homeland Security Federal Emergency Management Agency's Homeland Security Exercise and Evaluation Program (HSEEP). For an exercise to meet the requirements of 18 AAC 75.485(b)(1), ADEC must be included in the planning phase through the execution and evaluation phases of the exercise. Additionally, the exercise must be based on a spill scenario in the ODPCP. See the Oil Spill Response Exercise Manual for more information. A link to the document is provided in Section 3.11 of this plan.

Section 3.9 Environmentally Sensitive Areas *18 AAC 75.451(k)*

The ADEC, Environmental Protection Agency (EPA) –Region 10, and USCG Sector Western Alaska and U.S. Arctic manage response operations in accordance with the Alaska Regional Contingency Plan (RCP) and four Area Contingency Plans (ACP). P49 operations outlined in this plan are covered under the Arctic and Western Alaska Area Contingency Plan (ADEC 2022b) and the Southeast Alaska Area Contingency Plan (ADEC 2025a). See Section 3.11 for links to these plans.

Contact information for all federal and state agencies mentioned in this section are found in Table 1.2-1 in Section 1.2 of this plan. If there is oiled wildlife that needs to be captured, treated, and rehabilitated, that exceeds local capabilities, P49 will mobilize appropriate wildlife contractor(s) to respond, in coordination with NMFS, USFWS, and ADF&G. More information regarding wildlife protection is provided in Section 1.6.10 of this plan.

Section 3.9.1 Seasonal Conditions *18 AAC 75.451(k)(2)(A)*

The seasonal effect on environmental sensitivity is limited to whether or not some forms of wildlife or aquatic plant life are in critical periods of life. Critical periods are generally defined as time periods where species are involved in migration, breeding, nesting, and/or rearing young. It may also refer to time periods during the life cycle of a species, such as the juvenile stages for fish or larvae stage for aquatic insects.

Table 3.9-1 identifies critical periods for wildlife observed in the Cook Inlet Region. Table 3.9-2 identifies critical periods for wildlife observed in the Southeast Alaska region. This information can be used to determine additional Environmentally Sensitive Areas (ESAs) during a spill response.

Table 3.9-1 Critical Life Periods of Wildlife and Aquatic Plant Life in the Cook Inlet Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Birds												
Short-tailed albatross[1]					X	X	X	X				
Aleutian tern				X	X	X	X	X	X	X	X	
Arctic tern	X	X	X						X	X	X	X
Yellow-billed loon			X	X	X	X	X	X	X	X	X	
Loons (other)				N	N	N	N	N	N	N		
Grebes			X	X	X	X	X	X	X	X	X	
Trumpeter swans			X	X	X	X	X	X	X	X	X	
Greater white-fronted goose			X	X	X	X	X	X	X	X	X	
Snow goose			X	X	X	X	X	X	X	X	X	
Black Brant			X	X	X	X	X	X	X	X	X	

Table 3.9-1 Critical Life Periods of Wildlife and Aquatic Plant Life in the Cook Inlet Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Canada Goose			X	X	X	X	X	X	X	X	X	
Long-tailed duck						X						
Greater scaup			X	X	X	X	X	X	X	X	X	
Common merganser			X	X	X	X	X	X	X	X	X	
Red-breasted merganser				X	X							
Northern pintail			X	X	X	X	X	X	X	X	X	
Bufflehead			X	X	X	X	X	X	X	X	X	
Goldeneye			X	X	X	X	X	X	X	X	X	
Northern shoveler			X	X	X	X	X	X	X	X	X	
Steller's eider[2]	X	X	X	X			X	X	X	X	X	X
Common eider	X	X	X									X
Harlequin duck			X	X	X	X	X	X	X	X	X	
American Widgeon			X	X	X	X	X	X	X	X	X	
Green-winged teal			X	X	X	X	X	X	X	X	X	
Scoter			X	X	X	X	X	X	X	X	X	
Bald eagle	X	X	N	N	N	N	N	N	N	X	X	X
American golden plover					N	N	N	N				
Oystercatcher	X	X	X						X	X	X	X
Rhinoceros Auklet	X	X	X						X	X	X	X
Parakeet Auklet	X	X	X						X	X	X	X
Murres	X	X	X	N	N	N	N	N	X	X	X	X
Guillemots	X	X	X	X	X	X	X	X	X	X	X	X
Ancient Murrelet	X	X	X						X	X	X	X
Puffins	X	X	X		NX	LX	HX	HX	X	X	X	X
Fork-tailed storm-petrel	X	X	X						X	X	X	X
Leach's storm petrel									X	X	X	
Northern Fulmar	X	X	X	X	X	X	X	X	X	X	X	X
Red-legged kittiwake									X	X	X	
Mew Gull	X	X	X						X	X	X	X
Glaucous-winged gull	X	X	X	X	X	X	X	X	X	X	X	X
Herring Gull									X	X	X	
Black-legged kittiwake	X	X	X						X	X	X	X
Cormorants	X	X	X						X	X	X	X
Waterfowl	X	X	X	NX	NX	N	N	X	X	X	X	X

Table 3.9-1 Critical Life Periods of Wildlife and Aquatic Plant Life in the Cook Inlet Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Shorebirds	X	X	X	NX	NX	N	N	X	X	X	X	X
Seabirds				X	X	X	X	X	X	X		
Fish												
Pacific herring				SEA	SEA	SEJA	SEJA	SEJA				
Chinook salmon	E	E	EJ	J	JA	SA	SA	SEA	SEA	E	E	E
Chum salmon	E	E	EJ	J	J	SA	SA	SA	SEA	SEA	E	E
Coho salmon	E	E	E	EJ	J	JA	SA	SA	SA	SEA	SEA	E
Pink salmon	EJ	J	J	J	J	SA	SA	SEA	SEA	SEA	EJ	EJ
Sockeye salmon	E	E	J	J	JA	SA	SA	SA	SEA	E	E	E
Halibut				X	X	X	X	X	X			
Pacific cod						JA	JA	JA	JA	JA	JA	JA
Sablefish	JA	JA	JA	JA	JA	JA	JA	JA	JA	JA	JA	JA
Walleye Pollock	A	A	A									
Dolly varden				X	X	X	X	X	X			
Pacific herring				SEA	SEA	SEJA	SEJA	SEJA				
Invertebrates												
Razor clams	X	X	X	X	BX	BX	BX	SLX	SLX	LX	LX	LX
Dungeness crab	JA	JA	JA	JA	SJA	SEJA	SEJA	SEJA	SEJA	SJA	SJA	SJA
King crab	JA	SJA	SJA	SEJA	SEJA	SEJA	EJA	EJA	JA	JA	JA	JA
Tanner crab	SJA	SJA	SJA	SEJA	SEJA	SEJA	EJA	EJA	EJA	JA	JA	SJA
Blue mussels	X	X	X	X	BX	BX	BX	BX	BX	X	X	X
Marine Mammals												
Northen sea otter[2]	X	X	X	PX	PX	PX	X	X	X	X	X	X
Northern fur seal[3]	X	X							X	X	X	X
Steller sea lion[1]	X	X	X	PX	PX	PX	PMX	MX	MX	MX	MX	X
Harbor seal	X	X	X	X	PMX	PMX	PMX	MX	MX	MX	X	X
Gray whale				X	X	X	X	X	X	X		
Fin whale[1]				X	X	X	X					
Humpback whale[1]				X	X	X	X	X	X	X	X	
Minke whale				X	X	X	X	X				

Table 3.9-1 Critical Life Periods of Wildlife and Aquatic Plant Life in the Cook Inlet Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Cook Inlet beluga whale[1]	X	X	X	X	X	X	CX	CX	CX	CX	X	X
Killer whale	X	X	X						X	X	X	X
Blue whale[1]						X	X	X				
Sei whale[1]						X	X	X				
North Pacific right whale[1]			X	X	X	X	X	X	X	X	X	X
Harbor porpoise	X	X	X	X	X	X	X	X	X	X	X	X
Dall's porpoise	X	X	X	X	X	BC X	BC X	X	X	X	X	X
Pacific white-sided dolphin			CX	CX	CX	CX	CX	BC X	BC X			
Terrestrial Mammals												
Brown bear	DX	DX	DX	DX	X	X	X	X	X	X	DX	DX
Black bear	DX	DX	DX	DX	X	X	X	X	X	X	DX	DX
Caribou/reindeer	X	X	X	X	CX	CX	X	X	X	X	X	X
Moose	X	X	X	X	X	X	X	X	X	X	X	X
Red fox	X	X	X	P	P	X	X	X	X	X	X	X

Sources: (ERMA 2025), (ADEC 2025b), (Audubon 2025), (ADF&G 2025b, 2025c, 2025d), and (ARRT 2020)
[1] Endangered species
[2]Threatened species
[3]Depleted population under Marine Mammal Protection Act

Code	Life Stage	Code	Life Stage
N	Nesting	C	Calving
S	Spawning	J	Juvenile
E	Eggs	A	Adult
P	Pupping	D	Denning
M	Molting	X	Multiple, undetermined
B	Breeding	--	Blank cells indicate species is not present

Table 3.9-2 Critical Life Periods of Wildlife and Aquatic Plant Life in the Southeast Alaska Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Birds												
Gulls				X	X	X	X	X	X			
Shorebirds				X	X	N	N	X	X	X	X	
Waterfowl	X	X	X	X	X	M	M	M	X	X	X	X
Black-capped Chickadee	X	X	X	X	NE	EF	X	X	X	X	X	X
Boreal Chickadee	X	X	X	X	NE	EF	X	X	X	X	X	X

Table 3.9-2 Critical Life Periods of Wildlife and Aquatic Plant Life in the Southeast Alaska Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Chestnut-backed Chickadee	X	X	X	X	NE	EF	X	X	X	X	X	X
Sandhill Crane					N	X	X	X				
Harlequin Duck					N	X	X	X	X			
Marbled Murrelets	X	X	X	XN	XN	XN	XN	XN	X	X	X	X
Kittlitz's Murrelet	X	X	X	X	X	XN	XN	XN	X	X	X	X
Canada Goose			X	X	X	X	X	X	X	X	X	
Northern Goshawk					H	H	F	X				
Ruffed Grouse	X	X	X	E	E	X	X	X	X	X	X	X
Sooty Grouse	X	X	X	E	E	X	X	X	X	X	X	X
Yellow-billed Loon	X	X							X	X	X	X
Osprey				X	X	X	X	X	X	X		
Raven	X	X	N	E	X	X	X	X	X	X	X	X
Ptarmigan					E	H	H					
Short-tailed albatross[1]	X									X	X	X
Bald eagle	XF	XF	XF	NF	NF	HF	HF	F	XF	XF	XF	XF
Fish												
Pacific herring	X	X	S	S	S	X	X	X	X	X	X	X
Chinook salmon	E	E	E	E	X	X	X	S	E	E	E	E
Coho salmon	E	E	E	E	X	X	X	S	S	S	E	E
Chum salmon	E	E	E	X	X	X	X	S	S	E	E	E
Sockeye salmon	E	E	E	E	X	X	S	S	S	E	E	E
Pink salmon	E	E	E	X	X	X	X	S	S	E	E	E
Eulachon			SX	SX	SX							
Dolly varden	E	E	E	X	X			S	S	E	E	E
Coastal cutthroat trout				S	S	E	E					
Pacific cod	X	X	X	X	X	X	X	X	X	X	X	X
Pacific halibut	S			X	X	X	X	X	X			
Invertebrates												
Dungeness crab	E	E	E	E	E	E	X	S	S	ES	E	E
Golden king crab	E	E	E	E	E	E	X	S	S	ES	E	E
Red king crab	E	E	E	E	E	E	X	S	S	ES	E	E
Red sea urchin	X	X	X	X	X	X	X	X	X	X	X	X
Tanner crab	E	E	E	E	E	E	X	S	S	ES	E	E
Littleneck clam	X	X	X	X	X	X	X	X	X	X	X	X
Coonstripe shrimp	X	X	X	X	X	X	X	X	X	X	X	X
Northern shrimp	X	X	X	X	X	X	X	X	X	X	X	X
Sidestriped shrimp	X	X	X	X	X	X	X	X	X	X	X	X
Spot shrimp	X	X	X	X	X	X	X	X	X	X	X	X

Table 3.9-2 Critical Life Periods of Wildlife and Aquatic Plant Life in the Southeast Alaska Region

	MONTH											
SPECIES	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Marine Mammals												
Northern sea otters	X	X	X	X	P	X	X	X	X	X	X	X
Harbor seal					P	X	X	X	X			
Stellar sea lion[1]	X	X	X	X	P	P	X	X	X	X	X	X
Humpback whale[1]				X	X	X	X	X	X			
Terrestrial Mammals												
Brown bear	DX	DX	DX	DX	X	X	X	X	X	X	DX	DX
Black bear	DX	DX	DX	DX	X	X	X	X	X	X	DX	DX
Aquatic Plants												
Rockweed	X	X	X	X	X	X	X	X	X	X	X	X

Sources: (ERMA 2025), (ADEC 2025a), (ADF&G 2024b, 2024c, 2024d), (ARRT 2020), (NOAA 2025e)
[1] Endangered species
[2]Threatened species
[3]Depleted population under Marine Mammal Protection Act

Code	Life Stage	Code	Life Stage
N	Nesting	H	Hatching
S	Spawning	F	Fledging
E	Eggs	X	Multiple, undetermined
P	Pupping	D	Denning
M	Molting	--	Blank cells indicate species is not present

Section 3.9.2 Product Toxicity *18 AAC 75.451(k)(2)(B)*

Hydrocarbon-based fuels are complex mixtures of hundreds of chemicals. Smaller, light-end chemicals are more acutely toxic to organisms, but they volatilize rapidly into the atmosphere and are not persistent in the water column. In contrast, larger multi-ringed chemicals are more persistent in the environment and are more commonly associated with the fouling of fur and feathers of exposed wildlife. Fuels vary by the relative percentage of these two types of chemicals.

Highly volatile fuels such as gasoline and aviation gasoline are relatively less persistent in the environment (as opposed to viscous oils), because they contain a higher percentage of small, “light end,” volatile chemicals that are rapidly volatilized from the water column. Solubility of various compounds found in fuels is low in relation to volatility, so very little dissolves into the water column. What does dissolve tends to volatilize out of the water. Diesel fuel is slightly more persistent in the environment.

While the bulk of the fuel dissipates, “trace” contaminants, such as polycyclic aromatic hydrocarbons (PAHs), may persist in the environment. PAHs are chronically toxic and can be responsible for toxicity and environmental impacts for years after a spill. Very low levels can cause mortality to early life stages of fish.

Potential Effects of Oil on Marine Plants and Animals:

Kelp Beds – If oil contamination occurs during plant reproduction, this and other annuals rarely recover. Kelp loss would then affect those that depend upon this resource (e.g., many species of algae, invertebrates, fish, and marine mammals).

Eelgrass Beds – Small quantities of oil can weaken the beds, affecting potential habitat for many birds, fish, and invertebrates.

Salt Marsh Vegetation – Evidence indicates little long-term damage from light oil contamination. However, heavy pollution can damage growth potential and cause plant death. Loss of this habitat would adversely affect many species.

Fish – Direct or indirect toxicity may affect adult or juvenile fish, while eggs or larvae may be damaged by coating or direct toxicity. Crustaceans, shellfish, and benthic fish species may be affected by direct coating or by eating contaminated food.

Birds – Spilled oil can harm birds in a variety of ways. Direct contact is toxic and can oil their feathers. This may result in a loss of their thermo-regulating abilities, their ability to maintain the proper salt balance as well as their ability to fly or float. Ingestion may affect reproduction. Embryo and chick survival may be reduced as a result of oil-coated eggs.

Marine Mammals – All marine mammals may be poisoned by feeding on oil-contaminated marine organisms or from ingesting oil while cleaning their fur. They may survive with small amounts of oil on their fur; however, oil will reduce the insulation capabilities of the fur and hypothermia may result. Sea otters are the most susceptible to reduction in insulation due to oil spills because, unlike other marine mammals, they do not have a blubber layer for insulation. Instead, sea otters rely on their thick fur to trap air, providing insulation and buoyancy. Otters have a very high metabolic rate and must eat about 25 percent of their body weight in forage each day to survive. Oiled otters often groom rather than foraging, leading to internal oil toxicity and insufficient caloric uptake. Oiled otters must be rescued quickly, or they rapidly succumb to hypothermia, oil toxicity, and/or starvation.

Inhalation of hydrocarbon vapors is a primary concern for marine mammal exposure to spilled oil. Potential effects can include decreases to individual fitness and mortality. Oil can irritate the mucous membranes of marine mammals.

Terrestrial Mammals – Throughout the year, oil discharges affecting streams and beach fringe areas may affect terrestrial mammals, including furbearers, by contaminating habitat and/or food sources.

Section 3.9.3 Identified ESAs for Cook Inlet *18 AAC 75.451(k)(2)(C)*

Geographic Response Strategies (GRSs): Due to the large geographical area of operations, it is not practicable to list all GRSs and areas of concern. There are five GRSs that overlap with the vessel route to Seward and operations at the Seward Bulk Plant (Appendix D), and they are listed below (ADEC 2025c):

- Spring Creek, SZ-05

- Tonsina Creek, SZ-06
- Resurrection Bay/Seward Lagoon, SZ-35
- Thumb Cove, SZ-04
- Humpy Cove, SZ-03

Endangered Species and Critical Habitats: Steller sea lion haul outs and rookeries are present in the waters surrounding the Cook Inlet. Steller sea lions are classified as an endangered species under the Endangered Species Act. The critical habitat for Steller sea lions overlaps with the vessel route to Seward (ADF&G 2025d and NOAA 2025h).

The range of humpback whales overlaps with the vessel route to Seward and the area surrounding the Seward Bulk Plant. The species can be found in the waters surrounding Alaska any time of year, but they are more commonly found in the spring and summer when they come to Alaska to feed. They are listed as an endangered species and a critical habitat has been designated for the Western or Mexican Distinct Population Segment in portions of the waters of Cook Inlet and Resurrection Bay (NOAA 2025f).

The ranges of North Pacific right whales, fin whales, and sperm whales overlap with the vessel route to Seward and the area surrounding the Seward Bulk Plant. Migration of whales to the area commonly occurs during the summer months for feeding. All three species are listed as endangered species (NOAA 2025f).

Anadromous Waters: Salmon spawn in most of the streams and rivers that drain into Cook Inlet and Resurrection Bay. See Figure 3.9-1 for most anadromous waters within the area of the vessel route to Seward (ADF&G 2025a).

Other Sensitive Areas: There are two aquatic plant and shellfish farms/hatcheries within five miles of the vessel route to Seward and the Seward Bulk Plant (ADF&G 2025f).

Section 3.9.4 Identified ESAs for Southeast Alaska *18 AAC 75.451(k)(2)(C)*

Geographic Response Strategies (GRSs): Due to the large geographical area of operations, it is not practicable to list all GRSs and areas of concern. There is one GRS that overlaps with the vessel route to Skagway and the Skagway Bulk Plant (Appendix D), and it is listed below (ADEC 2025c):

- Taiya River, SE08-02

Endangered Species and Critical Habitats: Steller sea lion haul outs and rookeries are present in the waters surrounding Southeast Alaska. Steller sea lions are classified as an endangered species under the Endangered Species Act. The critical habitat for Steller sea lions overlaps with the vessel route to Skagway (ADF&Gd and NOAA 2025h).

The range of humpback whales overlaps with areas surrounding the vessel route to Skagway and the Skagway Bulk Plant. The species can be found in the waters surrounding Alaska any time of year, but they are more commonly found in the spring and summer when they come to Alaska to feed. They are listed as an endangered species, and a critical habitat has been designated for the Western or Mexican Distinct Population Segment in portions of the waters of the Lynn Canal and Taiya Inlet (NOAA 2025f).

ICS	Incident Command System
IDLH	Immediate Danger to Life or Health
IMH	Incident Management Handbook
IMO	International Maritime Organization
IMT	Incident Management Team
IWR	International Wildlife Research
JBER	Joint Base Elmendorf-Richardson
kt(s)	Knot, (Knots)
LEL	Lower Explosive Limit
MAWP	Maximum Allowable Working Pressure
MESA	Most Environmentally Sensitive Areas
MRO	Medical Review Officer
MSO	Marine Safety Office
NACE	National Association of Corrosion Engineers
NIMS	National Incident Management System
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
OB	Out Board
OCIMF	Oil Companies International Marine Forum
ODPCP	Oil Discharge Prevention and Contingency Plan
OHA	Office of History and Archeology
OMM	Operations and Maintenance Manual
OPA	Oil Pollution Act
ORB	Oil Response Barge
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSRO	Oil Spill Removal Organization
OWS	Oil Water Separator
PAH	Polycyclic Aromatic Hydrocarbons
PEL	Personal Exposure Limit
PIC	Person in Charge
PIO	Public Information Officer
PPE	Personal Protective Equipment
ppm	Parts per Million
PRAC	Primary Response Action Contractor
PREP	Preparedness for Response Exercise Program
psi	Pounds per Square Inch
QI	Qualified Individual
RCP	Regional Contingency Plan
RPS	Response Planning Standard
RR	Railroad
SCA	Secondary Containment Area
SCAT	Shoreline Cleanup Assessment Technique
SCBA	Self-Contained Breathing Apparatus
SDS	Safety Data Sheets

SERC	State Emergency Response Commission
SMFF	Salvage and Marine Firefighting
SMT	Spill Management Team
SOLAS	Safety of Life at Sea
SOSC	State On-Scene Coordinator
STAR	Spill Tactics for Alaska Responders
TLV	Threshold Limit Value
TSC	Total Storage Capacity
TTLR	Tank Truck Loading Rack
UHF	Ultra-High Frequency
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UT	Ultrasonic Thickness
VHF	Very High Frequency
VOO	Vessel of Opportunity
WCD	Worst Case Discharge

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Section 4.4 Wildlife Capture, Treatment, and Release Methods

18 AAC 75.452(a)(1)(D)
18 AAC 75.449(a)(6)(M)

Contaminated birds and sea otters are captured and stabilized by qualified personnel contracted through SEAPRO and Chadux from the IBR, IWR, Alaska SeaLife Center, or other qualified agencies. After stabilization at the site, the injured animals are transported for rehabilitation to one of several facilities in the state. Contaminated pinnipeds and cetaceans are typically treated and rehabilitated in the field by qualified personnel through contract or other qualified agencies with equipment transported to the spill site. Refer to ODPCP Sections 1.6.4, 1.6.10, and 3.9.

The existing system provides the best level of animal care (and thus, is considered the best available technology) by assuring that cleanup and rehabilitation are done at proper facilities and by trained personnel.

If the situation warranted a mobile or field facility set up, SEAPRO, Chadux, IBR, IWR, and Alaska SeaLife Center have equipment and processes in place.

Table 4.4-1 BAT: Wildlife Capture, Treatment, and Release Methods

Evaluation Criteria	Existing	Existing
Technology Options	*Contract with SEAPRO/Chadux to provide wildlife response through subcontract with IBR, IWR, and Alaska SeaLife Center.*	*Contracted experts capture and rehabilitate impacted animals.*
AVAILABILITY: Is the technology available for use by the applicant? Is the technology the best in use in other similar situations?	Yes, existing.	Yes, existing.
TRANSFERABILITY: Can the technology be applied to the applicant's operation?	Yes, existing.	Yes, SEAPRO/Chadux would contract additional resources.
EFFECTIVENESS: Is there a reasonable expectation that the technology will provide increased spill prevention or other environmental benefits?	Effective, as long as contracted staff arrive onsite quickly.	Effective, as long as contracted staff arrive onsite quickly.

Table 4.4-1 BAT: Wildlife Capture, Treatment, and Release Methods

Evaluation Criteria	Existing	Existing
Technology Options	*Contract with SEAPRO/Chadux to provide wildlife response through subcontract with IBR, IWR, and Alaska SeaLife Center.*	*Contracted experts capture and rehabilitate impacted animals.*
COST: Cost of achieving BAT, including consideration of cost relative to remaining years of service of current technology in use by applicant.	Cost is incident dependent.	Cost is incident dependent.
AGE & CONDITION: Age and condition of current technology used (and considering similar equipment in current or past use under similar circumstances).	IBR and Alaska SeaLife Center staff are professionally trained and use field tested and agency approved methods for hazing and wildlife protection.	Contractors are expected to maintain personnel who are professionally trained and use agency approved methods for capture and rehabilitation.
COMPATIBILITY: Is the technology compatible with existing operations?	Yes, existing.	Yes, existing.
FEASIBILITY: Feasibility of this technology from an engineering and operational view.	Yes.	Yes.
ENVIRONMENTAL IMPACTS: Does the use of this technology impact the environment in a manner that offsets the technology's benefits?	None.	None.

BAT Summary – Existing technology/capability is considered the best available by consideration of all evaluation criteria and in accordance with the *Wildlife Protection Guidelines (WPG) for Oil Spill Response in Alaska*.

Section 5.1 ADEC Adjusted Response Planning Standard

Per 18 AAC 75.440, the plan holder must be able to contain and control the ADEC RPS volume that enters open water within 48 hours and to clean up within the shortest possible time, being sure to minimize damage to the environment. A calculation of the ADEC response planning standard is displayed in the table below.

Table 5-1 Response Planning Standard Calculations

Total Oil Capacity (bbls)	15% of Total Oil Capacity (bbls)
Southeast Alaska Region RPS	
130,000	130,000 x 0.15 = 19,500
Cook Inlet Alaska Region RPS	
220,000	220,000 x 0.15 = 33,000

Geographic Response Strategies for *COOK INLET Subarea, Seward Zone*

Eldorado Narrow/Cape Resurrection, SZ-34

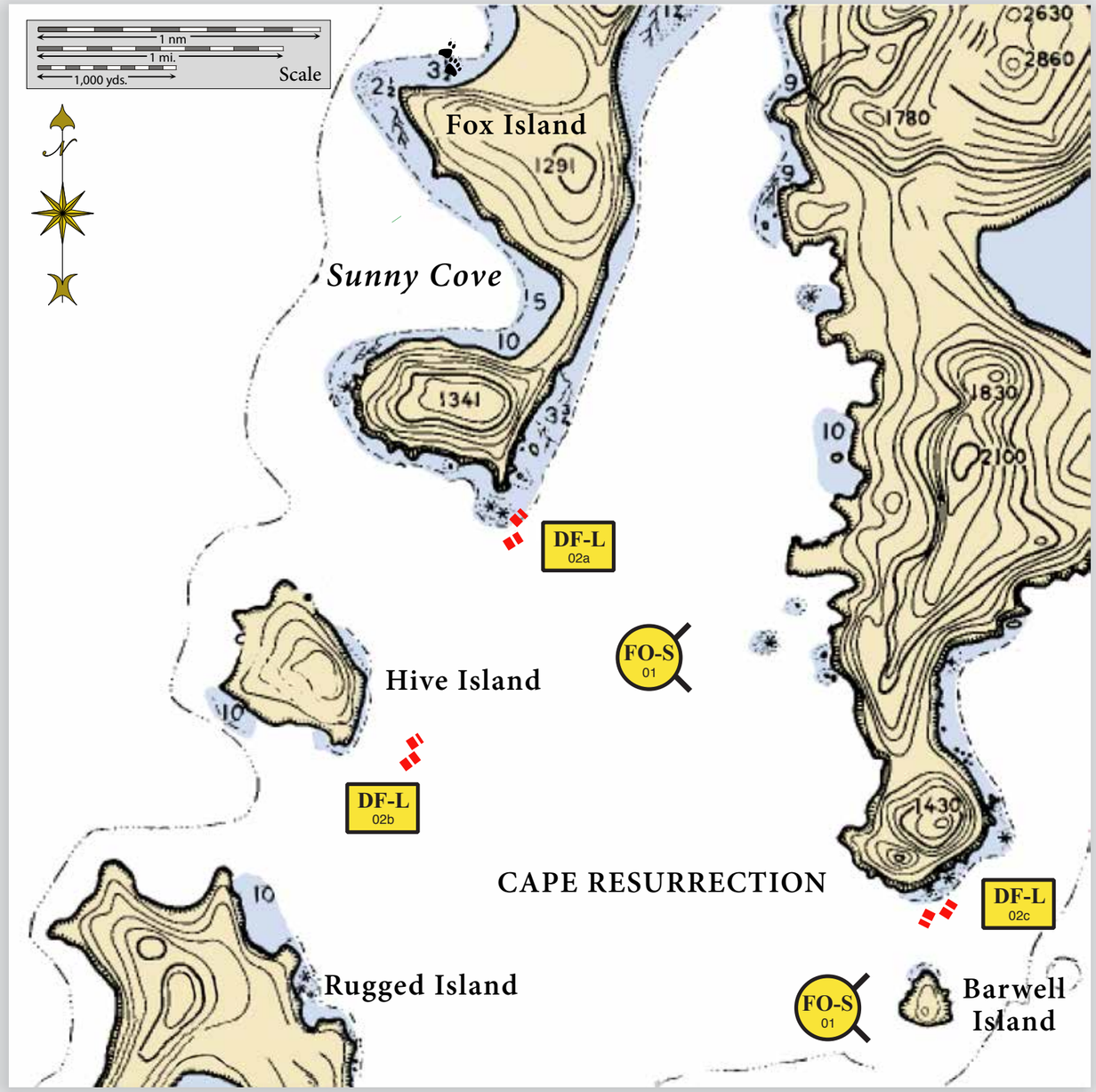
Cape Resurrection viewed from the south.

Eldorado Narrows viewed from the west.

Map Legend

- DF-L — Deflection Booming, Live
- FO-S — Free-oil Recovery
- Protected-water Boom

Center of map at 59° 54.19' N Lat., 149° 19.01' W Lon.



This is not intended for navigational use.

September 25, 2013

DRAFT This tactic map is a working draft being used to develop a Geographic Response Strategy at this location. The tactics represented here have not been approved by the Subarea Committee and should not be considered final. If you have questions or comments please contact us by email at contact@nukaresearch.com.

NUKA Research & Planning Group, LLC.

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
SZ-34-01 FO-S	**Eldorado Narrows** Nearshore waters in the general area of: Lat. 59° 52.49 N Lon. 149°18.67 W	**Free-oil Recovery** Maximize free-oil recovery in the offshore & nearshore environment of Eldorado Narrows depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the Eldorado Narrows. Use aerial surveillance to locate incoming slicks.	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Seward	Via marine waters Chart 16681	Same as SZ-34-02	Vessel master should have local knowledge. Use extreme caution extreme currents and rocky shores
SZ-34-02 DF	**Eldorado Narrows** Location based on aerial survey a. Lat. 59° 53.73 N Lon. 149°20.26 W b. Lat. 58° 35.89'N Lon. 149°34.26'W c. Lat. 58° 52.04 N Lon. 149°17.03 W	**Deflection-Live** Deflect oil that is going to impact the rookery and bird colonies in the Eldorado Narrows and away from the area and into free oil collection.	Use aerial surveillance to identify the incoming oil and it's direction. Depending the direction of incoming oil, at each location hold in place using vessels 2 sections of 300 ft. protected-water boom in a cascaded pattern in the path of the incoming oil. Deflect incoming oil out for free oil collection.	**Deployment** **Equipment** 1200 ft. protected-water boom **Vessels** 12 ea. class 3 **Personnel/Shift** 36 ea. vessel crew/general techs **Tending** **Vessels** 12 ea. class 3 **Personnel/Shift** 36 ea. vessel crew/general techs	Seward	Via marine waters Chart 16681	Marine mammals-seal, otters, orcas Birds-seabird nesting Habitat- exposed rocky shore	Vessel master should have local knowledge. Consult with the National Marine Fisheries Service prior to implementing this tactic. Surveyed: not yet Tested: not yet

NOTE: Sensitive resource information can be found on other maps which can be accessed through the sensitive area section of the Cook Inlet Sub-Area Contingency Plan: http://dec.alaska.gov/spar/perp/plans/scp_ci.htm.