

**KODIAK
SUBAREA CONTINGENCY PLAN**

**SCENARIOS
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SCENARIOS: INTRODUCTION

In preparing the spill scenarios, the following topics were taken into consideration:

A. SPILL HISTORY

The spill history from the files of ADEC Spills Database and the NOAA Scientific Support Coordinator provided the reference points for spill scenarios. The focus is only on significant and large spill events. This listing does not take into account the entire database of spills prepared by ADEC for the region, and small spills that had little or no anticipated environmental impact are not included in the SSC's files.

B. HAZARD/RISK ASSESSMENT

The majority of vessel spills occur due to a combination of bad weather and equipment failure. Mariners operating in good weather and with properly-maintained equipment do not typically experience difficulties. The region's maritime climate is comparatively mild with regard to general Alaskan temperatures; however, the islands are often fog-shrouded and frequently struck by storms. The weather in the region is the result of the interaction between major weather systems that move northward across the Gulf of Alaska or eastward across the Bering Sea and the land topography.

Although there are no crude or heavy oil port facilities in the Kodiak Subarea, due to its proximity to trade routes of vessels laden with such cargo, the Kodiak Subarea is certainly vulnerable to any major marine oil pollution incident from Unimak Pass to Cook Inlet to Prince William Sound. A portion of the Great Circle Route, a major international shipping route, is through Unimak Pass, which brings those vessels close enough to pose a potential threat if there were ever a marine casualty resulting in a substantial oil spill. There are an estimated 3,000-3,500 vessels, approximately 30-40 of them tank ships, that transit through Unimak Pass each year. Approximately 65 bulk chemical tank vessels over 400 gross tons transit the area annually. Chemical cargos include ammonia, urea, liquefied natural gas, herbicides and pesticides, and chlorine.

Foreign-flagged vessels transiting through this area may or may not have a federal tank or non-tank vessel response plans and Western Alaska geographic specific appendix, depending on whether they make US ports of call. See report "Vessel Traffic in the Aleutians Subarea" for additional information. The report can be accessed at: http://www.dec.state.ak.us/spar/perp/docs/060920vesselreport_s.pdf. The more common substantial marine oil pollution threat for the Kodiak Subarea however would likely be from one of the many commercial fishing vessels, freight/container ships or possibly even a cruise ship.

A joint ADEC-Coast Guard study is currently underway that will address in detail risks posed by vessels transiting the Aleutians Subarea, and may likely include some residual risk factors for surrounding or adjoining subareas including the Kodiak Subarea. The background and current status of this joint study can be found at the following website: http://www.dec.state.ak.us/spar/perp/ai_risk/ai_risk.htm

C. VULNERABILITY ANALYSIS

The natural habitats of the Kodiak Subarea support extensive fish and wildlife populations that are extremely important to the social, economic, and cultural welfare of local residents. Offshore areas support a highly productive marine ecosystem, rich with inter-tidal, benthic, and pelagic plant and animal life that, in turn, provides nourishment for extensive populations of marine and androgynous finfish, shellfish, seabirds, and marine mammals. Rocky shorelines and cliffs provide pupping/haul-out areas for seals and sea lions and nesting areas for seabirds.

Commercial fishing and fish processing are economic mainstays in the region. As an average, there are approximately 350 fishing vessels operating in the Kodiak Subarea region, with seasonal flux. Shelikof Strait and nearby Unimak Pass and False Pass also witness heavy traffic both for transport servicing villages to the north and from Cook inlet and Prince William Sound to the Aleutian chain and for foreign-vessel transport between North America and the Far East.

Historical properties and cultural sites important to the prehistory of the region could also be negatively affected by a spill. Potential effects of spills are not limited to the initial impact of oil, since the response methods used to mitigate a spill can be more detrimental to resources than the spill itself. Therefore, appropriate response techniques need to be considered in relation to sensitive resources.

SCENARIOS: PART ONE – COASTAL OIL

A. WORST CASE SCENARIO

Situation: In the early morning hours of March 10, a severe windstorm parts the anchor chain of M/V LOGSHIP, which is anchored in Kazakof Bay near the Silver Bay Logging Camp on Afognak Island. While attempting to get underway, the vessel is pushed onto the rocks. At 0300 Air Station Kodiak receives notification via VHF from the vessel's master. The master states that the hull has come into contact with the rocks, but the extent of damage is uncertain. The master feels that the vessel is not in danger of sinking and is not taking on water in any of the manned spaces.

Vessel particulars: 600ft foreign-flagged logging cargo ship

Status: 75% loaded with logs for Japan

Fuel Capacity: 180,000 gallons bunker fuel

Tank configuration: unknown

On-scene Wx: Winds - 45 mph with gusts to 70 mph, diminishing throughout the day. Skies - clear

Size of the Discharge: A logging ship with a total fuel capacity of 186,000 gallons of Intermediate Fuel Oil (IFO-bunker fuel) runs hard aground on the rocks, discharging an estimated 100,000 gallons of IFO (approximately two-thirds of total onboard).

Cargo Salvage: The vessel is not considered a total loss and plans are to initiate temporary repair of the damaged vessel in a safe haven, and then proceed to a major shipyard for permanent repairs.

Sensitive Areas at Risk: Specific information on resources at risk can be extracted from the Sensitive Areas Section in consultation with the resource trustees. From a general viewpoint, resources in the immediate area of the spill that are at risk include sea lions, otters, waterfowl concentrations, and seabird colonies. Kazakof Bay is on Afognak Island and is approximately 45 miles NNW of the town of Kodiak. Any significant spill in this area would severely impact local and regional users of this location.

The shoreline geomorphology in the immediate vicinity of the spill is exposed rocky shores. Sand and gravel beaches, exposed wave-cut platforms and sheltered tidal flats can be expected to be impacted from this spill in the early stages due to their proximity to the spill event. The impacts of a spill of this volume are far reaching and would affect a large area. An extensive, coordinated effort between trustee agencies would be necessary to develop a comprehensive approach to environmental impact abatement. The Sensitive Areas Section provides a framework for accomplishing this task.

Initial Action Description

1. Notification (Assume the responsible party has notified the required agencies in accordance with the vessel response plan)

FOSC will notify the following:

- ** ADEC Central Alaska Response Team or 24-hour ADEC reporting contact
- * ADNR
- * ADF&G
- * ADMVA, DHSEM
- ** CGD17 OPCEN, to activate support resources including:
 - District (m), District Office, Marine Safety Division
 - DRG, District Response Group
 - DRAT, District Response Advisory Team
 - PIAT, Public Information Assist Team
 - RRT, Regional Response Team
- ** NRC, National Response Center
- *** NOAA SSC, Scientific Support Coordinator
- ** NSFCC, National Strike Force Coordinating Center
- ** NPFC, National Pollution Fund Center
- *** Local Emergency Managers and tribal leaders of any impacted/threatened communities
- *** City of Kodiak

Key: * = Notification initiated by State
** = Message notification
*** = Notification by FOSC

2. Initial On-Scene Investigation, Inspection, Evaluation & Recommendations

Gather information from over-flights, crew reports, video recordings and any other reliable source to document scene and develop initial response strategy.

Have investigation team immediately conduct drug testing of the vessel's crew and conduct interviews to determine cause of incident.

Determine cargo and fuel capacities. Contact last port if immediate cargo amounts are unknown.

Collect charts and log books for evidence.

Determine cargo salvage options and lightering potential.

Issue Notice of Federal Interest and Letter of State Interest.

Evaluate slick size, direction of travel, weather, area of coverage, proximity to shore, wildlife areas and potential impacts, and other relevant information that might affect response decisions.

Establish direct communication with the Unified Command Center if it is established in the field. If no Unified Command Center is established in the field, consider using USCG Sector Anchorage conference room as the initial Command Post while USCG/ADEC personnel are en-route to the field Command Center located in Kodiak.

3. Initial Response Actions

Secure the source, if possible.

Develop containment/booming plan for implementation as weather abates.

Take actions to stabilize the vessel. Notify USCG Marine Safety Center of vessel information and situation and request stability information.

Evacuate any injured personnel or unnecessary crew members.

Evacuate crew for drug testing if possible.

Complete notifications and include other resources as required. Include up-channel notification to include the RRT, DRG, DRAT, PIAT, MLC PAC contracting team, NPFC, and NSFCC.

Develop joint goals and objectives with the RP/State/USCG.

Issue Notice to Mariners restricting vessel traffic in the immediate vicinity of the incident.

Issue Notice to Airmen, through the FAA, restricting aircraft traffic in the immediate vicinity of the incident.

Ensure preparation of Site Safety Plan.

Determine any fisheries impacts, and take appropriate action.

Prioritize areas for exclusion booming, protective booming, and shoreline cleanup. Review existing Geographic Response Strategies (GRS) developed for the Kodiak Subarea.

Review seafood processor protection plans and implement specific plans to protect the water intakes from any spilled oil.

Establish a Joint Information Center and activate a Unified Command website for the incident.

Prepare initial press release jointly with the Unified Command.

Keep local and tribal stakeholders informed.

Consider alternatives to mechanical response: Dispersant application, *in situ* burning, or destruction of entire vessel and cargo by burning.

Schedule routine over-flights of the impacted area. Request USCG support in developing an aviation operations plan for the spill to control air traffic in the area.

In consultation with trustee agencies, determine requirements for wildlife protection, collection, and rehabilitation.

Evaluate RP's capability to carry out an appropriate response.

Utilize local knowledge, NOAA SSC and other NOAA hazmat resources as necessary to predict spill trajectory and potential impacts.

Determine feasibility of removal actions based on:

- Will removal actions cause more damage to the environment than allowing the pollutant to naturally dissipate?
- Can cleanup be initiated before the pollutant disperses, making recovery impractical?
- Can equipment be deployed without excessive risk to the life and health of personnel?

4. Spill Response Organization

Establish command structure as prescribed in the Unified Plan, Annex B. The **Unified Plan** describes the Unified Command concept and provides organizational diagrams for several different situations. A spill of this magnitude could be declared a Spill of National Significance (SONS). The roles and responsibilities of the SONS structure are also identified in the **Unified Plan, Annex B**. The pre-designated FOSC for the region becomes the Area Operations Coordinator. The SONS incident continues as a Unified Command response. The escalation of an incident to a SONS is intended to make available more resources and personnel for response.

A Liaison Officer will be assigned to act as a liaison with any landowners, leaseholders or affected interest groups that have no jurisdictional authority, and other interested parties. The Regional Stakeholder Committee will be formed to serve as the official stakeholder and community representative voice to the Unified Command.

5. Containment Countermeasures and Cleanup Strategies

Secure the source, if possible.

Stabilize the vessel through the best means available; fuel transfer, lightering, etc.

Reduce the pollution potential by removing fuel from the vessel at the earliest opportunity.

Boom the vessel at the earliest opportunity, pending favorable weather.

If mechanical cleanup is not feasible or adequate, consider alternatives of *in situ* burning or dispersants.

Organize Shoreline Cleanup Assessment Teams in preparation for shoreline surveys.

Ensure the wildlife protection plan is in place and trustee agencies are working closely with RP to ensure minimum impact to resources in area.

Ensure that trustee agencies with responsibility for determining the requirement for implementation of a Federal/State Natural Resource Damage Assessment (NRDA) are notified that wildlife may be affected. The lead trustee will then coordinate the NRDA separate from the response and with funds provided by the NPFC.

Request NOAA SSC to provide spill tracking and trajectory modeling to determine present location and path of spill.

6. Resource Requirements

- a. **Equipment:** Quick deployment of high volume oil recovery vessels and other mechanical collection equipment is essential to ensure success of the response and to mitigate spill damage. A spill of this size will require all area response equipment as well as out-of-region response equipment in a joint coordinated cleanup effort. (See Resources Section B)
- b. **Vessels, Skimmers, Boom, and other Spill Response Equipment:** Given the volume of this spill scenario, it is anticipated that skimming systems will be immediately requested from the major spill cooperatives in Alaska, and deployed to the spill area, as the Kodiak Subarea has minimal pre-staged response equipment. (Mutual Aid Agreements between the major spill response co-ops should allow for temporary, out-of-region deployments of major spill response equipment.) Releasing equipment designated for a regulatory response requirement in one area to be used in a response in a different area must be addressed by the Unified Command. The equipment and vessels should arrive on scene with all equipment prepared for immediate deployment. The major spill cooperatives in

the state are also listed in the Resources Section, as well. These companies have a variety of bladders and smaller barges for nearshore deployment, as well as offshore storage barges and portable tanks for shoreside temporary storage.

- c. Vessels of Opportunity: Both CISPRI and SERVS have a fleet of pre-identified and trained large vessels of opportunity. Vessels range in size and construction from landing craft (both large and small), fishing vessels (variety of sizes and horsepower), and numerous other vessels from charter boats for personnel transportation to skiffs for near shore response. CISPRI and SERVS fishing vessel fleets are experienced in boom deployment and have considerable local knowledge. A ready fleet of response vessels experienced in pollution operations and meeting HAZWOPER requirements are located in Kodiak, English Bay, Port Graham, Homer, Kenai, and Seldovia. The Seldovia SOS has a response structure to dispatch and support local vessel operations and maintains an immediate callout list of qualified vessels and personnel. An available armada of response vessels exists with potential to benefit a spill response if properly supported and effectively managed. Logistical arrangements and support will be necessary to maintain any large scale deployments of ocean-going vessels to the incident area in support of cleanup operations.
- d. Personnel: Initial personnel activation will require several hours to days to organize. The Kodiak Subarea, unlike much of the state, does have a substantial cadre of HAZWOPER-trained individuals to man cleanup vessels and participate in other cleanup and response activities.

7. Resource Availability and Resource Procurement

For the purposes of this scenario, it is assumed that agreements would be reached between all involved parties (USCG, State of Alaska, ACC, CISPRI, ACS, SERVS) that would allow the resources of the spill cooperatives to be brought into the response. This assumption does not imply that such agreements are currently in place or that such agreements would be reached. MSRC and NAVSUPSALV are potential resources that could be available for this scenario, if proper agreements could be reached that are acceptable to the involved parties. All these response coops have highly organized management teams knowledgeable in the ICS structure and routinely exercise their roles as responders.

Procuring the resources identified in this spill response is the RP's responsibility. A spill of this magnitude would likely exceed \$1 million each day during the initial stages of the response. Experience acquired during past spills has shown that funds must be processed at a much higher than normal rate to maintain the response. The Oil Spill Liability Trust Fund is available to the FOSC in the event the RP is unable or unwilling to pay the costs of the spill response.

8. Shortfalls

- a. Equipment: A major shortfall in equipment could be expected if the response cooperatives, the State, and the USCG can't develop agreements that will allow all response resources of these groups to be brought to bear. The issues include, but are not limited to, liability, financial arrangements, release from regulatory requirements, and rules for operating facilities with less than the required response equipment. The lack of agreements in place could hinder a response effort that exceeds the capability of an individual response cooperative. No regulatory requirement exists that mandates such mutual aid agreements.

Lighterage for skimmed product is always a consideration when determining the adequacy of a response. Lighterage capability has increased dramatically over the past decade. Part of the lighterage concerns can't be answered without a determination as to whether or not decanting will be allowed and can be planned as part of the response. Fire fighting capability for this scenario is extremely limited. Resources to fight a fire in this scenario would have to be brought from outside the region.

b. Personnel (logistical/training issues):

(1) Housing – Local hotels, seafood processing facility man-camps, on-water vessels and barges will be required to sustain the response. Several organizations in Alaska cater "field camp" setups which include housing and feeding facilities. These facilities are available in flyaway form and as floating hotels. Most of these field camps are idle during the winter months in of Alaska.

(2) Food - Catering services for field personnel would likely be procured coincidentally with the remote housing units. Catering for response personnel not deployed to the field could be handled using resources within the region.

(3) Fuel - Several fuel facilities are located in the Kodiak area. These facilities would be required to supply the numerous vessels operating in the area. Fuel may become a concern given the long term response anticipated for a spill of this magnitude.

(4) Transportation: Kodiak is the only major commercial airport located in the immediate vicinity of the spill area, and would serve as the primary logistics supply points. In most cases, equipment must be transported over water or sling loaded via helicopter. Favorable weather conditions are also a major factor in hindering both air and water transportation for personnel and equipment.

(5) Manpower and Training: Shoreline cleanup crews will require OSHA level Hazwoper training commensurate with the tasks they will be directed to perform. Volunteers will not be solicited, and individuals desiring to help will be directed to a central coordinator for hiring emergency response workers.

c. Funding: Funds availability and access should pose no problem regardless of the financial capabilities of the RP. If funding problems arise, the FOSC has access to the Oil Spill Liability Trust Fund and procedures are in place to make these funds available. The SOSC, in the event of a State funded response, has access to the 470 Fund and procedures are in place to make these funds available as well.

If the spill is "federalized," problems have been identified regarding the payment of accounts due. The response organizations will likely be unable financially to expend the amounts of money anticipated if reimbursement occurs on a 30 day payout. Ten days, as a maximum, has been discussed as the period when receipts must be paid. Failure to pay in this time period could result in a collapse of the logistical supply line, and therefore the response. Federal contracting personnel must evaluate this requirement and determine a feasible solution.

d. Minimum Response Times: Estimates indicate that the RP could have response personnel and equipment on scene within six hours of the incident report, pending favorable weather. The response to this spill will depend heavily upon the sea state and weather in the incident area.

9. Spill Cleanup Timetable

The on-water spill response will continue until all recoverable oil is collected with weather forces a major factor in operations due to personnel safety. Shoreline cleanup will begin as soon as possible after beaches are oiled. The number of months/years required to terminate cleanup operations depends heavily upon the efficiency of the initial on-water response.

10. Disposal Options

Debris disposal is the responsibility of the RP. The volume of oil contaminated debris will exceed the disposal capability of the region, unless on-site disposal methods are approved by the appropriate agencies. The RP must present a disposal plan to appropriate agencies along with necessary permits for the requested disposal plan. Disposal options for debris are limited in Alaska.

Information on waste streams and typical waste products that will be generated during a response is contained in this subarea plan in the *Response Section, Part Two* and in the **Unified Plan, Annex E, Appendix II**. This scenario will generate a very large volume of recovered product and oil-contaminated equipment. The remoteness of the region will complicate disposal and elevate the costs of handling and transportation. The scarce availability of shipping and storage facilities makes it difficult to comply with the timeframes contained in hazardous waste handling regulations. The task of managing waste disposal must be approached aggressively and very early in the response. Facility/vessel owners must investigate and identify potential staging areas for contaminated debris and equipment as well as the potential for long-term storage capabilities due to severe weather preventing timely transportation and disposal of accumulated waste. Also, areas designated for cleaning contaminated equipment must be able to handle the contaminated runoff.

11. Cleanup Termination

Termination of cleanup should be a joint decision by the UC based on the following criteria:

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

B. MAXIMUM MOST PROBABLE CASE SCENARIO

The maximum most probable case is determined by the largest recorded oil spill to date in Western Alaska, which was the M/V Selendang Ayu on December 8, 2004. During this event, a total of 321,052 gallons of IFO 380 bunker fuel and 14,680 gallons of diesel were released. Due to the large size of this spill, the response actions for the maximum most probable and the worst case scenarios will not differ significantly.

C. AVERAGE MOST PROBABLE CASE SCENARIO

The average most probable case for the Kodiak Subarea would likely be a fishing vessel that either sinks, goes aground, or otherwise creates a pollution event through the release of non-crude oil (most likely diesel). Many of the response actions outlined in the worst case scenario would remain the same, although the need for out-of-region response equipment, activation of a Unified Command, Joint Information Center, and deployment of federal and state resources would not be at the same scale. Notifications would remain the same to keep all concerned stakeholders and resource agencies informed of the incident.

SCENARIOS: PART TWO – HAZMAT

1. **Situation:** The incident occurs on July 30 at 10pm at a seafood processing plant in the city of Kodiak. In a normally unmanned cold storage area, a high pressure (120-150psi) liquid pipe flange failed, and began releasing anhydrous ammonia at the rate of approximately 95lbs/min. It is estimated that by the time it was detected and ultimately secured, the release was ongoing for approximately 40 minutes.

The facility employee making the security round first attempted to isolate the leaking pipe, but was unfamiliar with the proper isolation valves and was overcome by the ammonia and left the area because of discomfort. A night manager was called and promptly arrived and successfully stopped the discharge by securing the proper cut-off valves.

When the anhydrous ammonia release occurred, a fixed ammonia air monitor with an audible alarm failed to activate and therefore did not warn anyone the liquid ammonia release was ongoing. Upon securing the discharge, the manager went to the fish processing area to report the leak and clear the area after they sounded the evacuation alarm. During the evacuation of the facility, several people were overcome by the ammonia.

The anhydrous ammonia release occurs at a rate of 95lbs/min over a period of approximately 40 minutes, for a total of 3800 lbs.

2. **Location:** The incident occurred at a seafood processing facility in Kodiak.
3. **Release Information:** Over a period of 40 minutes, approximately 3,800 pounds of anhydrous ammonia was released into the atmosphere.

Date of Incident: July 30

On-scene Weather: Winds: Northerly at 10 mph, gusts to 15mph (towards town)
Temperature: 63°F
Relative Humidity: 89%
Drizzling rain

4. **Sensitive Areas at Risk:** Waterfowl concentrations; seals; sea lions; seafood processing employees; small boat harbor; Kodiak local residents, and seasonal cruise ship tourists.

5. **Initial Actions:**

- Initial call taken by the Kodiak Fire Department, and up-channel reporting initiated.
- Determine and confirm personnel safety hazards in the immediate area and downwind of the ammonia release.
- Ensure public health and safety by either evacuating populace at risk or directing them to shelter in place.
- Immediate notification of ADEC via the Spill Report Hotline. Captain of the Port, Western Alaska, also receives notification simultaneously from the Marine Safety Detachment in Kodiak, followed by notification from the National Response Center. Follow-on federal/state/local agency notifications are made based on the Emergency Notification List in the Response Section.

- DEC notifies the Statewide Hazmat Response Team of the situation and the need for possible deployment.
- DEC also notifies Aware Consulting, and activates a term contract with them for technical advice on dealing with the ammonia release and post-incident investigation.
- Activate response structure including local responders and the Statewide Hazmat Response Team.
- Contact FAA to restrict airspace.
- Prepare initial press release.
- Due to the threat to public health and safety, the initial local Incident Commander or a representative from the City of Kodiak will continue to serve as a member of the Unified Command until the threat is abated.
- Commence mobilization of response personnel.
- Incident Command System activated, and Unified Command formed.
- COTP directs the MSD to establish a Safety Zone around the facility.
- USCG drafts POLREP One. ADEC drafts and releases initial SITREP.
- USCG issues Letter of Federal Interest. ADEC issues Notice of State Interest in a Pollution Incident.
- Issue Letter of Designation.
- State of Alaska alerts additional response action contractors for possible activation, and also alerts other members of the Statewide Hazmat Response Team for additional support, if required.
- Determine if the Hazmat response is categorically excluded under the national programmatic agreement to protect historic properties, and if not, activate an FOSC Historic Properties Specialist.

6. Initial On-Scene Investigation/Inspection Evaluation and Recommendations:

- Develop information from facility worker reports, release size, utilize video recording as much as possible to document scene and develop initial response strategy.
- Determine overall system capacities for anhydrous ammonia, and determine potential for additional releases, in consultation with the facility manager and refrigeration specialist.
- Collect charts and refrigeration system maintenance and re-supply files for evidence.

7. Containment Countermeasures and Cleanup Strategies:

The Unified Command will coordinate and develop an Incident Action Plan to:

- Conduct initial containment,
- Establish the initial on scene command post and staging area.
- Support local responders, and provide updated information to Federal, State, local, and tribal entities.

8. Resource Requirements:

- Due to the short nature of the release, the Statewide Hazmat Response Team will likely be stood down after determination that the ammonia release has stopped. The team will remain on standby pending any further releases that may be prolonged in nature. The Aware Consulting staff person will be mobilized to Kodiak along with several DEC responders to provide additional support to the local responders.

9. Response Requirements:

- Equipment:** Any action to contain, plug or prevent additional release will require the use of appropriate personal protective equipment (PPE).
- Personnel:** Personnel responding to this incident (local firefighters, and other responders) will be required to be trained to at least the first responder awareness level. Those entering the scene to secure the leak source and initiate cleanup and containment will require training to the technician level.

10. Shortfalls:

- Equipment:** The City of Kodiak does not maintain a Level ‘A’ entry capable Hazmat Team. There is a Level ‘A’ Hazmat capability at USCG Air Station Kodiak that may be available within a reasonable period of time. There are limited pieces of equipment maintained by the seafood processing facility.
- Personnel:** Due to the location of the accident and the localized hazard (i.e., anhydrous ammonia release over an hour’s period), additional emergency response personnel are not deemed necessary, unless the release recurs over a prolonged period of time.
- Funding:** Funding of response and clean-up actions will be the responsibility of the Responsible Party.
- Minimum Response Times:** Response should be initiated immediately. Based on the location of the incident, the RP, local fire chief, and Coast Guard will initially respond to the situation. The FOSC, SOSC, and Aware Consulting representative (all deploying from Anchorage) is expected to arrive at the scene by early afternoon.

12. Spill Cleanup Timetable: This response should last no more than a couple of days. Cleanup of the immediate area will be required, and may simply consist of facility ventilation. The RP indicates that he/she will direct a complete inventory of the ammonia refrigeration system, and determine the potential for any potential releases. DEC directs the Aware Consulting ammonia specialist to assist with the inventory and conduct a thorough inspection of the system to determine the cause of the release and potential for future ammonia releases.

14. Cleanup Termination: The FOSC and SOSC will determine the appropriate time to terminate operations based on the RP’s ability and assurances that further releases will not occur. The investigation into the cause of the release will continue after response termination.