SOUTHEAST
SUBAREA CONTINGENCY PLAN

SCENARIOS
SECTION

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SCENARIOS: PART ONE – COASTAL OIL

A. WORST CASE SCENARIO

Situation: At 0500 on April 1, during 50 knot wind gusts, the tethering lines between the tugboat *"Bert"* and the fully loaded tank barge (*T/B*) *SZN-101* parted. The Tug *Bert* maneuvered to deploy the emergency towing cable, but because of nighttime darkness and strong winds, was unsuccessful. The outbound Alaska Marine Highway System (AMHS) passenger ferry M/V *Lituya*, enroute to Metlakatla, collided with the inbound tank barge at the vicinity of Kelp Rock Light 1 (LLNR 22045), approximately 3.5nm NW of Metlakatla. The M/V *Lituya* hit the barge broadside, causing the cargo holds to be breached. The current pushed the T/B *SZN-101* into the rocks at Gull Island, where heavy wave action caused the T/B *SZN-101* to split into two and lose its full cargo over the next hour. The winds and waves decreased to a steady 20 knots and 2 feet by 0700. The M/V *Lituya* was superficially damaged and transited back to the AMHS dock in Ketchikan. No persons were injured. The owners made arrangements with the Southeast Alaska Petroleum Resource Organization (SEAPRO), O'Brien's response management company, and Alaska Commercial Divers to mount the response effort. Local fish streams and salmon hatchery areas are pre-boomed to prevent damage and minimize economic disruption. Shoreline Cleanup Assessment Teams discovered multiple cases of oiled wildlife. News channels requested interviews and updates on the large wildlife impact in the area and have arranged interviews with Metlakatla authorities. The Cruise Line Agency of Alaska asked to be kept informed. Volunteers requested to be involved.

Vessel Particulars: 300-foot tank barge; homeport Seattle.
Fuel Capacity: 500, 000 gals (aviation fuel, kerosene (#2 diesel), and unleaded gasoline)
Status: 100% loaded
On-scene Weather: rain; winds, 50 knots, gusts to 65knots decreasing to 15 knots by 0700.
Location: from Kelp Rock Light 1 to Gull Island, 2 to 3.5 miles northwest of Metlakatla.
Date: April 1
Event Time: 0500

Size of Discharge: 500,000 gallons of aviation fuel, kerosene (#2 diesel), and unleaded gasoline

Cargo Salvage: The T/B *SZN-101* considered a total loss. The Tug *Bert* and the M/V *Lituya* suffered superficial damage. The USCG will oversee the marine salvage operations and the investigation.

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 historic properties, sea lions, otters, waterfowl concentrations, and seabird colonies. Metlakatla is approximately two nautical miles southeast of the incident. Any significant spill in this area would severely affect local and regional users of this location, such as subsistence areas. 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 due to their proximity to the spill event. The affects of a spill of this volume would be far reaching. 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.

Response

1. **Notification** (Assume the responsible party has notified the required agencies in accordance with the vessel response plan, which should include notification of the US Coast Guard, required by federal law, and the State of Alaska, which requires the spiller to notify the Alaska Dept. of Environmental Conservation) Upon initial notification, the FOSC and/or the SOSC will, in turn, notify the following:

   ADF&G, Alaska Dept. of Fish and Game
   ADNR, Alaska Dept. of Natural Resources
   ADMVA, Alaska Dept. of Military &Veteran Affairs
   NRC, National Response Center
   NOAA SSC, Scientific Support Coordinator
   NSFCC, National Strike Force Coordinating Center
   NPFC, National Pollution Fund Center
   USDOI, US Dept. of the Interior
   Local Emergency Managers and tribal leaders of any impacted/threatened communities
   City of Metlakatla
   CGD17 OPCEN, to activate support resources, including the following:
      District (dr), District Office
      DRG, District Response Group
      DRAT, District Response Advisory Team
      PIAT, Public Information Assist Team
      RRT, Regional Response Team

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

- Dispatch representatives to the scene at the first opportunity.
- Gather information from over-flights, crew reports, video recordings and any other reliable source to document the situation and develop initial response strategy.
- Have investigation team immediately conduct drug testing of the vessel's crew and interviews to determine the cause of the incident.
- Ensure that the Responsible Party (RP) is notified and responding appropriately.
- Establish direct communications between the FOSC, the SOSC, and the Responsible Party (RP) representatives.
- Determine cargo and fuel amounts. 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, as appropriate.
- Evaluate/determine slick size and direction of travel; on-scene weather; area of coverage and shore impacts; imminent threats to wildlife and sensitive habitats, and other relevant information that might affect response decisions.
- Request USCG cutter support to provide initial on-scene platform and/or other available vessel platforms.
- Establish direct communication between on-scene responders and the Unified Command Post.

3. Initial Response Actions

- Secure the source, if possible.
- Commence notifications of all pertinent parties per the Response Section of this plan, providing initial situation assessment: incident location, quantity spilled, threat to wildlife and sensitive habitats, status of source control, etc.
- Establish a Unified Command in the Juneau Federal Building and forward operating bases and staging areas in Ketchikan.
- Establish an Incident Management Team under the Unified Command.
- Develop containment/booming plan for implementation as weather permits.
- Complete notifications and include other resources as required. Ensure up-channel notification to include the RRT, DRG, DRAT, PIAT, MLCPAC contracting team, NPFC, and NSFCC.
- Consult with affected natural resource trustees on resources at risk, native land use, and proposed response actions that may affect trust resources, including consultation on wildlife response and threatened and endangered species and their critical habitats.
- Establish Joint Information Center in Ketchikan or Juneau, as determined by the Unified Command.
- Activate a Unified Command website for the incident.
- Prepare a Unified Command initial press release.
- Prioritize response activities according to the joint goals and objectives developed by the Unified Command.
- 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 a Site Safety Plan.
- Determine if any fisheries or subsistence use areas will be affected and take appropriate action, including closure notices and public warnings.
- Prioritize areas for exclusion booming, protective booming, and shoreline cleanup. Review the *Geographic Response Strategies Section* of this plan to identify locations for the area.
- Review seafood processor protection plans and implement specific plans to protect the water intakes from any spilled oil.
- Activate an FOSC's Historic Properties Specialist.
- USCG drafts first POLREP. ADEC drafts and releases initial SITREP.
- Keep the Metlakatla community and local and tribal stakeholders informed.
- Convene a Regional Stakeholder Committee to provide input to the Unified Command.
- Schedule routine over-flights of the spill response area. Request USCG support in developing an aviation operations plan to control air traffic in the area.
- In consultation with trustee agencies, determine requirements for wildlife protection, hazing, collection, and rehabilitation.
- Evaluate the RP's capability to carry out an appropriate response.
- Use local knowledge, NOAA SSC, and other NOAA resources, as necessary, to predict spill trajectory and potential impacts.
- Determine feasibility of removal actions based upon the following questions:
    - Will removal actions cause more damage to the environment than allowing the pollutant to naturally dissipate, disperse, or degrade?
    - Can cleanup be initiated before the pollutant disperses, making recovery impractical?

- Can equipment be deployed and response activities undertaken without excessive risk to the life and health of response 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.
- Boom the tank barge at the earliest opportunity, pending favorable weather.
- 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 the 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 and/or sensitive habitats may be affected. The lead trustee will then coordinate the NRDA separate from the response and with funds provided by the RP or the National Pollution Fund Center.
- Request NOAA Scientific Support Coordinator to provide spill tracking and trajectory modeling to determine present location and path of spill.
- Request National Weather Service to provide spot forecasting weather information.

6. Resource Requirements

- Quick deployment of high volume oil recovery vessels and other mechanical collection equipment may be needed to mitigate spill damage. This spill may require all area response equipment as well as out-of-region response equipment in a joint coordinated cleanup effort. (See the *Resources Section*.) Because of the high evaporative rate of the cargo, it is recognized that equipment from outside the area may not arrive in a timely manner to have a significant effect on the cleanup.
- Skimming systems may be requested from the major spill cooperatives in Alaska and deployed to the spill area. The equipment and vessels should arrive on scene with all equipment prepared for immediate deployment. The major spill cooperatives in the state are listed in the *Resources Section*, as well. These companies have a variety of bladders and smaller barges for near-shore deployment, as well as offshore storage barges and portable tanks for shore-side temporary storage.
- Initial personnel activation will require several hours to days to fully staff required positions, depending on specialty assignments and travel logistics.

- Volunteers will be managed per Annex V of the **Unified Plan** and Part Five of the *Resources Section* of this plan.

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, the RP, and SEAPRO) 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.
- Procuring the resources identified for this spill response is the RP's responsibility. A spill of this magnitude may exceed $1 million 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, and the ADEC State On-Scene Coordinator can activate the Oil and Hazardous Substance Release Prevention and Response Fund (the Response Fund) to offset response costs incurred by State agencies. The State and the federal government will initiate cost recovery from the Responsible Party.

8. Disposal Options

- Debris disposal is the responsibility of the RP. The volume of oil-contaminated debris will exceed the disposal capabilities of the region, unless on-site disposal methods are approved by the appropriate agencies. The RP must present a waste management plan to appropriate agencies along with necessary permits. Disposal options for oil-contaminated 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.
- Under the conditions outlined in this scenario, a very large volume of recovered product and oil-contaminated equipment and debris will be generated. The remoteness of the region will complicate disposal and elevate the costs of handling and transportation. The limited availability of shipping and storage facilities makes it difficult to comply with the time frames contained in hazardous waste handling regulations. The task of managing waste disposal must be approached aggressively and very early in the response effort. 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.
- Areas designated for cleaning contaminated equipment must be able to handle the contaminated runoff.

9. Cleanup Termination

Termination of cleanup should be a joint decision by the Unified Command based upon one or more of the following criteria:

- 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
- Further removal operations would cause more environmental harm than the oil to be removed; or
- Cleanup measures would be excessively costly in view of their potential contribution to minimizing a threat to the public health or welfare or the environment; and
- All efforts required to repair any damage resulting from removal actions have been completed.

Spill Cleanup Timetable: Estimates indicate that the RP could have response personnel and equipment on-scene within four hours of the incident report, pending favorable weather. The response to this spill will depend heavily upon the sea state and weather conditions in the incident area, a major factor for operations due to personnel safety and equipment capabilities.. The on-water spill response will continue until all recoverable oil is collected. Shoreline cleanup will begin as soon as possible after beaches are oiled and continue until the Unified Command determines that shoreline operations should cease. A major factor determining the timeline of a diesel oil spill response is the generally rapid evaporation and degradation of the material; but the high toxicities associated with diesel may manifest in high wildlife rehabilitation needs, which could take months to resolve.

Shortfalls: Weather, tides, and constrictions inherent in nighttime operations can complicate the response for this scenario. Other factors for consideration are the remote location and the lack of supporting infrastructure in the immediate area, as well as the following items:

- 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.
- Wildlife Rehabilitation Facilities: Rehabilitation facilities with an adequate number of trained, experienced workers and large enough to handle more than a few birds/animals are limited in Southeast Alaska. If a temporary facility cannot be erected and experienced staff brought in, the transportation of injured wildlife out of the area would need to be addressed. The public will often judge an oil spill response on how well the wildlife issues are handled, thus, this is an area that deserves more scrutiny.
- Personnel (logistical/training issues):
  - Housing – Local hotels and on-water vessels and barges will be required to sustain the response. It may be possible to arrange agreements with the City of Metlakatla, but it is likely that most of the staging will be out of Ketchikan. 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. The Unified Command should consider activating the Alaska Regional Response Team to support housing issues. The State ferry M/V Kennicott should be given consideration as a forward command post and housing facility for responders; al requests should go through the ADEC SOSC. The M/V *Kennicott* was specially designed to support a major spill response effort and detailed information on the vessel is available in Annex E of the **Unified Plan**.
  - 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 local sources.
  - Fuel – Several fuel facilities are located in the Ketchikan area and could serve to supply the numerous vessels operating in the area.
  - Transportation – Ketchikan is the only major commercial airport located in the immediate vicinity of the spill area and would serve as the primary logistics supply point. In most cases, equipment must be transported over water or sling-loaded via helicopter to the incident location. Weather conditions could hinder both air and water transportation for personnel and equipment.
  - Manpower and Training – Shoreline cleanup crews will require OSHA level Hazwoper training commensurate with the tasks they will be directed to perform. Initially there will be a limited number of trained personnel in the area available to respond immediately. Volunteers will not be

solicited, and individuals desiring to help will be directed to the RP's coordinator for hiring emergency response workers.

- Funding – Availability and access to proper funding should pose no problems 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. 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.

B. MAXIMUM MOST PROBABLE CASE SCENARIO

The maximum most probable case chosen for the Southeast Subarea is the scenario of a single-bottomed ore carrier that goes aground or otherwise creates a pollution event through the release of persistent oil (Bunker C). Many of the response actions outlined in the worst case scenario will not differ significantly for the maximum most probable scenario. A compounding issue in this scenario is the persistent nature of Bunker C oil as compared to the diesel fuel spilled in the worst case scenario. Notifications would remain the same to keep all concerned stakeholders and resource agencies informed of the incident.

Situation: On November 4 at 1100, the ore ship M/V *Latarsha Oldendorff* finished loading three cargo holds of ore and was outbound with a marine pilot onboard and two tug escorts. As the vessel approached the narrow mouth of Hawk Inlet, the port-aft attending tug lost power. Sustained 35-knot winds quickly swung the stern of the vessel into shallow water where the hull struck rocks, ripping gashes in two fuel tanks containing Bunker C oil. The USCG Sector Command Center received notification via VHF-FM radio from the master. The master stated the vessel was not in danger of sinking and was not taking on water in any of the manned spaces.

Vessel Particulars: 585-ft German-flag freight ship M/V *Latarsha Oldendorff*; 20-person crew
Fuel Capacity: 204,921 gallons (bulk carrier); six fuel tanks along side of vessel, single hull (25, 000 gal per tank)
Status: Loaded
On-Scene Weather: winds, 35 knots sustained with gusts to 45 knots; temperature, 41 degrees with precipitation; seas from SE at 6 to 8 feet.
Location: entrance to Hawk Inlet, west Admiralty Island, 57’04 N 135’24 W.
Date: November 4
Event Time: 1100

Size of the Discharge: An estimated 50,000 gallons of Bunker C (approximately two of the tanks were compromised).

Cargo Salvage: The vessel owner planned to initiate temporary repair of the damaged vessel in a place of refuge and then proceed to a major shipyard for permanent repairs. Discharge of the ore cargo would need to be addressed; the vessel cannot be laden when going into dry dock for repairs. USCG Sector Juneau would review and approve in coordination with ADEC a place-of-refuge location for the vessel and salvage, temporary repair, and transit plans.

Response: The Hawk Inlet Facility has skiffs and 1000 feet of containment boom available; however, due to high winds, they would be hampered from mounting an initial response. The oil spill response organization, SEAPRO, would launch the M/V *Neka Bay* and an oil response barge upon notification; estimated arrival time 8 hours from downtown Juneau. Other equipment could be transiting or otherwise available in the area (consult the *Resources Section*). Response efforts should include the following:

- **Notification** (Assume the responsible party has notified the required agencies in accordance with the vessel response plan, which should include notification of the US Coast Guard, required by federal law, and the State of Alaska, which requires the spiller to notify the Alaska Dept. of Environmental Conservation) Upon initial notification, the FOSC and/or the SOSC will, in turn, notify the following:
    - ADF&G, Alaska Dept. of Fish and Game
    - ADNR, Alaska Dept. of Natural Resources
    - NRC, National Response Center

    - NOAA SSC, Scientific Support Coordinator
    - NSFCC, National Strike Force Coordinating Center
    - NPFC, National Pollution Fund Center
    - USDOI, US Dept. of the Interior
    - Local Emergency Managers and tribal leaders of any impacted/threatened communities
    - CGD17 OPCEN
- Make notifications to all trustees and tribal concerns; Shee'Atika, the Sitka Native Corporation, has land use/ownership. Provide a concise initial situation assessment and specific spill information, including exact location, quantity spilled, potential threat, status of source control, etc.
- Establish contact with the responsible party (the RP's "qualified individual"), as soon as possible, and ensure they are responding, preferably with an official on scene.
- Establish Safety Zones.
- Deploy USCG helicopter and 110-foot patrol boat resources for initial assessments. Evaluate slick size, direction, area of coverage, proximity to shore, weather, wildlife observed in area, and possible pollution impacts.
- Commence activation/movement of in-house resources (State and federal). Draft POLREP (USCG) and SITREP (ADEC) and distribute. Dispatch State and federal representatives to the scene at the first opportunity and establish direct communications with the FOSC, the SOSC, and the RP Representative..
- Have NOAA provide trajectories for the spill.
- Have NWS provide spot forecasts and detailed weather information.
- Form a Unified Command, including immediate activation of a JIC.
- Review the *Geographic Response Strategies* (GRS) *Section* in this plan to determine if any GRS near the incident should be employed to protect sensitive areas at risk.
- Review the Potential Places of Refuge Section in this plan when determining an appropriate location where the vessel can seek shelter to effect repairs.
- Consult with affected natural resource trustees on resources at risk, native land use, and proposed response actions that may affect trust resources, including consultation on wildlife response and threatened and endangered species and their critical habitats.
- Activate an FOSC's Historic Properties Specialist.
- Manage volunteer requests per Annex V of the **Unified Plan** and Part Five of the *Resources Section* of this plan.

Sensitive Areas at Risk: Waterfowl and harbor seals are some of the resources present in the area during early November. Historic properties are at risk year round. Specific information on resources at risk can be found in the Sensitive Areas Section of this plan and in consultation with the resource trustees. The exposed shoreline consists of rocky and gravel beaches. The spill impact of 50,000 gallons of Bunker C is significant. The effects of a spill of this volume are far reaching and would affect a large area. An extensive, coordinated effort between trustee agencies will be necessary to develop a comprehensive approach to environmental impact abatement. The *Sensitive Areas Section* provides a framework for accomplishing this task.

Shortfalls: Weather, tides, and constrictions inherent in nighttime operations can complicate the response for this scenario. Other factors for consideration are the remote location and the lack of supporting infrastructure in the immediate area.

C. AVERAGE MOST PROBABLE CASE SCENARIO

The average most probable case for the Southeast Subarea likely would be a fishing vessel that either sinks, goes aground, or otherwise creates a pollution event through the release of its diesel fuel. Many of the response actions outlined in the worst case scenario would remain the same. Representatives of the USCG and ADEC will likely coordinate cleanup efforts onsite. The need for out-of-region response equipment, the activation of a Unified Command or a Joint Information Center, and the deployment of federal and state resources are unlikely in this scenario. Notifications would remain the same to keep all concerned stakeholders and resource agencies informed of the incident.

Situation: After the fourth Sac Roe herring opener in Sitka Sound, the owner/operator of the 1945 wooden seiner *F/V Little Flower* fell asleep at the helm due to fatigue. At 2300 on March 22, the vessel ran aground on rocks surrounding Kasiana Island during an outgoing tide, rolling on its side, and discharging fuel from the vents. Planks began to stress and the vessel flooded; it could not be refloated. With an incoming tide, the *F/V Little Flower* became a hazard to navigation. A Good Samaritan vessel assisted *F/V Little Flower* in plugging the fuel vents and deploying the initial containment boom. A heavy sheen is observed in the area. The owner contacted a contractor to dive and mitigate the damage; the divers found a two-foot gash in the bow. After the vessel is refloated, temporary repairs were made. Uncertain whether the cargo of herring was contaminated, thus requiring disposal, ADEC personnel arrived to oversee the testing and permitting process involved in oily fish waste disposal. The RP made arrangements for the F/V *Little Flower* to complete repairs in a shipyard.

Vessel Particulars: 50-foot wooden seiner; 1945; homeport Seattle; three crew.
Fuel Capacity: 3000 gallons (diesel); small quantities of lube oil.
Status: Two-thirds loaded; 2000 gallons diesel onboard.
On-Scene Weather: winds, 20 mph; temperature, 46 degrees; steady rain.
Location: Sitka Sound
Date: March 22; Sac Roe herring fishery opener.
Event Time: 2300
Event Location: Kasiana Island; 57’04 N 135’24 W

Response:

- **Notification** (Assume the responsible party has notified the required agencies in accordance with the vessel response plan, which should include notification of the US Coast Guard, required by federal law, and the State of Alaska, which requires the spiller to notify the Alaska Dept. of Environmental Conservation) Upon initial notification, the FOSC and/or the SOSC will, in turn, notify the following:
    - ADF&G, Alaska Dept. of Fish and Game
    - ADNR, Alaska Dept. of Natural Resources
    - NRC, National Response Center
    - NOAA SSC, Scientific Support Coordinator
    - NSFCC, National Strike Force Coordinating Center
    - NPFC, National Pollution Fund Center
    - USDOI, US Dept. of the Interior
    - Local Emergency Managers and tribal leaders of any impacted/threatened communities
    - CGD17 OPCEN

TCI Environmental from Sitka completes initial booming within 2 hours of notification. Cook Construction from Gustavus provides diving and refloating expertise.

Sensitive Areas at Risk: Waterfowl, herring, whales, harbor seals, otters, shellfish, and salmon are some of the resources either present in the area during late March or potentially affected through habitat loss. Historic properties are at risk year round. Specific information on resources at risk will be found in the *Sensitive Areas Section* of this plan and in consultation with the resource trustees. The exposed shoreline is rocky. Review of the *Geographic Response Strategies* (GRS) *Section* in this plan will allow determination if any GRS near the incident should be employed to protect sensitive areas at risk.

Shortfalls: Weather, tides, and constrictions inherent in nighttime operations can complicate the response for this scenario.

SCENARIOS: PART TWO – HAZMAT

MAXIMUM MOST PROBABLE HAZMAT SCENARIO

The maximum most probable Hazmat case for the Southeast Subarea would likely be a seafood processing plant that is either abandoned, sustains an accidental catastrophic release, or otherwise creates a catastrophic release of anhydrous ammonia. Many of the response actions outlined in the worst case scenario would remain the same, although the need for out-of-region response equipment, the activation of a full incident management team or a Joint Information Center, and the 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.

Situation: *(This scenario is based on an actual event from August 20, 2009, when the flume supplying water to the City of Pelican AK, failed due to heavy rains throughout the previous days. At the time of the flume collapse a construction project to upgrade Pelican's hydroelectric plant was underway. Part of the project included installation of a temporary waterline to provide Pelican with drinking water. This line is now being used to supply all water to Pelican, including both the town and the Pelican Seafood's fish processing plant.)*

A temporary water line has insufficient capacity to concurrently meet the drinking water needs of Pelican residents and cooling water requirements for the fish plant. The water line is used to fill Pelican's water tank at night, and during the day the water flow is diverted to the fish plant to cool the compressors in the refrigeration system. The refrigeration system uses anhydrous ammonia as a refrigerant; there is an estimated 20,000 to 30,000 pounds of anhydrous ammonia in the refrigeration system at the fish plant. Heavy rains could cause a failure of the flume, resulting in a disruption to the water supply that cools the fish plant's compressors, essentially shutting down the refrigeration system. Without sufficient cooling water there is an increase of pressure in the system. Most modern systems could withstand these pressures; however, the system in the fish plant is quite old. Personnel taking care of the system have previously noted minor leaks, and a continued increase in pressure would add additional stress to the system piping. The cooling coils and refrigerant lines for the system are located above the freezers. The wood structure, according to personnel on scene, is frozen. There is concern in the community that should the wood structure thaw, the roof of the fish plant could collapse and break the system piping, resulting in a catastrophic release of anhydrous ammonia.

Facility Description: fish processing plant
Status: Non-operational
Maximum Capacity: 30,000 lbs of anhydrous ammonia
On-Scene Weather: 56 degrees, winds E at 35 knots, rain
Location: Pelican, AK, 57 57.6N 136 13.8W
Date: August 20
Size of Release: estimated 20,000 to 30,000 lbs of Anhydrous Ammonia

Sensitive Areas at Risk: Includes local citizens, waterfowl concentrations during migration periods, and local wildlife in the area of the plant or a resultant plume. Inform local citizens of the situation at the facility and what actions are recommended if the tanks do release. In the event of a release, ensure immediate notification of ADEC via the Spill Report Hotline. Captain of the Port, Southeast Alaska, would also receive notification simultaneously from the National Response Center. Follow-on federal/state/local agency notifications will be made based on the Emergency Notification List in the Response Section of this plan.

Response

1. Initial Response Actions

- Determine and confirm personnel safety hazards in the immediate area and determine downwind exposure from a potential ammonia release.
- Ensure public health and safety by developing plans for evacuating populace at risk or by developing shelter in place plans.
- Identify response structure to include local responders and the Statewide Hazmat Response Team.
- Have the system inspected to check for leaks and to locate any potential weak points and to assess its overall condition.
- Hire specialist to inspect the facility to ensure that as the ice thaws the building will remain structurally sound.
- ADEC consults with the Statewide Hazmat Response Team of the situation and alerts them on the need for possible deployment.
- ADEC activates a term contract with Aware Consulting for technical advice on preventing a catastrophic release and for developing plans to deal with any ammonia release and post-incident investigation.
- Conduct controlled releases to ensure that the system does not get over-pressurized.
- Inform and coordinate with FAA to restrict airspace, if a release occurs.
- Due to the threat to public health and safety, the initial Incident Commander or a representative from the City of Pelican will serve as a member of the Unified Command until the threat is abated.
- Once a plan has been established, commence mobilization of response personnel.
- Incident Command System activated, and Unified Command formed.
- COTP directs the establishment of a Safety Zone around the facility.
- USCG drafts first POLREP. ADEC drafts and releases initial SITREP.
- Prepare initial press release.
- 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, as well as other members of the Statewide Hazmat Response Team for additional support, if required.
- If a Hazmat release occurs, determine whether the response is categorically excluded under the national programmatic agreement to protect historic properties, and if not, activate an FOSC Historic Properties Specialist.

2. Initial On-Scene Investigation/Inspection, Evaluation, and Recommendations (Should a release occur).

- Develop information from facility worker reports, including release size; utilize video recording as much as possible to document scene and develop initial response strategy.
- Verify overall system capacities for anhydrous ammonia and determine potential for additional

releases, in consultation with the facility manager, refrigeration specialist, and Aware Consulting technical representative.

- Collect charts and refrigeration system maintenance and resupply files for evidence.

3. Containment Countermeasures and Cleanup Strategies

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

- Plan for initial containment should a release occur,
- Develop preventive measures to reduce the risk of a catastrophic release.
- Establish the initial on-scene command post and staging area.
- Support local responders and provide updated information to federal, State, local, and tribal entities.

4. Resource Requirements

Activation of the Statewide Hazmat Response Team will be contingent on the nature of the release. If the facility continues to release anhydrous ammonia periodically and poses a longer term risk to the community, the Hazmat Team may deploy to the scene to engage in source control measures.

The Aware Consulting staff person will be mobilized along with several ADEC responders and the USCG to provide additional support to the local responders.

If a catastrophic release occurs but the public safety threat is no longer present after the initial release, the Hazmat Team will be stood down. After consultation with the Unified Command and a determination that no threat of exposure to the community remains, the team will be released to their home station.

5. Response Requirements

- **Equipment:** Any action to contain, plug, or prevent an 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.

6. 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.

Spill Cleanup Timetable: This response would likely last no more than several days. Cleanup of the immediate area will be required and may simply consist of facility ventilation. The RP should direct a complete inventory of the ammonia refrigeration system and determine the potential for any potential releases. Meanwhile, ADEC directs the ammonia specialists, Aware Consulting, to assist with the inventory and to conduct a thorough inspection of the system to determine the cause of any release and potential for future ammonia releases.

Shortfalls:

- **Equipment:** The City of Pelican does not maintain a Level A entry capable Hazmat Team, and Level A Personal Protective Equipment is not available in Pelican.
- **Personnel:** Due to the location of the accident, and assuming evacuation and proper shelter in place actions have occurred, additional emergency response personnel are not deemed necessary, unless the release extends over a prolonged period of time.
- **Funding:** Funding of response and cleanup 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 and local fire chief will initially respond to the situation if a release occurs. The FOSC, SOSC, and Aware Consulting representative are expected to arrive at the scene by early afternoon.

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