## Letter of Promulgation

Welcome to the Cook Inlet Harbor Safety Plan (HSP). The goal of the HSP is to enhance marine safety and environmental stewardship via risk based decision making. First published and distributed early in 2016, the plan is intended to provide information, guidelines, and Standards of Care for marine operators in Cook Inlet. The creation of this plan is the product of the collaboration of maritime stakeholders as represented on the Cook Inlet Harbor Safety Committee's (CIHSC) Harbor Safety Plan Work Group and others in our maritime community, who shared their time and expertise to help develop this plan.

The United States Coast Guard (USCG) and the Alaska Department of Environmental Conservation (ADEC) are advisors, active participants, and contributors to the CIHSC and this plan. This plan is strongly endorsed by the USCG Captain of the Port, Western Alaska (COTP) and the ADEC Central Alaska Region State On-Scene Coordinator.

Section A of the plan introduces the reader to the CIHSC. Section B is primarily informative in nature and provides important information for professional mariners transiting Cook Inlet. Section C includes Standards of Care (SOC) and documents certain "good marine practice" especially important to operations in Cook Inlet. Section D is the Appendix.

The HSP Work Group is committed to maintaining and updating this plan as new information and changing technologies warrant.

The Cook Inlet Harbor Safety Committee has a web site at:

www.cookinletharborsafetycommittee.org

Stephen Ribuffo

Stephen Ribuffo

Chairman, Cook Inlet Harbor Safety Committee

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# SECTION A: INTRODUCTION

## A.1. PURPOSE OF THE COOK INLET HARBOR SAFETY COMMITTEE

Although there have been several different stakeholder forums to precede it, the CIHSC was created in 2015 as a risk reduction option identified by the Cook Inlet Risk Assessment. The committee is formed and managed by various port and waterway stakeholders who hold an interest in promoting safety and the environmental protection of Cook Inlet.

The mission of the CIHSC is to provide a proactive forum for identifying, assessing, planning, communicating, and implementing operational and environmental measures beyond statutory and regulatory requirements that promote safe, secure, and efficient use of Cook Inlet. The committee is made up of delegates appointed by broadly based organizations representing a span of interests focused on Cook Inlet. Additionally, various governmental agencies formally support the work of CIHSC in advisory roles.

With its quarterly meetings and broad stakeholder group participation, the CIHSC offers an agile and vibrant forum to lead the stakeholder community in identifying and resolving conflicts or concerns, existing and potential, in the commercial and recreational use of Cook Inlet. The CIHSC should be viewed as the agent of choice by government, industry, and environmentalists to present and respond to user conflicts, desired new environmental practices, new safety initiatives, and natural resource conflicts or changes.

CIHSC takes responsibility for capturing existing standards and protocols as well as developing new standards and protocols that address those environmental and operational elements of maritime operations that are somewhat unique and especially significant to Cook Inlet. The standards and protocols have been compiled in the Cook Inlet HSP which is intended to complement and supplement existing federal, state, and local laws and regulations with advice to mariners regarding unique conditions and requirements that may be encountered in Cook Inlet. These standards and protocols are not intended to supplant or otherwise conflict with the laws or regulations; nor are they intended to replace the good judgment of a ship's master in the safe operation of his/her vessel.

#### **Action Items:**

Especially important action items for vessel masters will be highlighted. throughout the plan in special "action items" boxes like this one.

## A.2. PROCEDURES

The elements of the Cook Inlet HSP were developed by Work Groups selected and approved by the CIHSC. To assure the broadest perspectives on measures considered, Work Groups are expected to include interested parties from within the CIHSC and to reach beyond the committee for membership, participation, and advice. Work Groups that developed the HSP included:

## 1. Navigation Work Group

*Mission Statement:* Utilizing the knowledge and expertise of industry professionals to identify and support industry-wide best practices which mitigate risk, improve navigational safety and ensure the flow of commerce.

## 2. Harbor Safety Plan Work Group

*Mission Statement:* Facilitate the compilation of information to enhance marine safety and environmental stewardship in Cook Inlet.

## 3. Salvage Work Group

*Mission Statement:* The Salvage Work Group seeks to identify and support industrywide best practices related to Maritime Emergency Response in the Cook Inlet area to protect environmental resources and value of property.

## 4. Marine Firefighting Work Group

*Mission Statement:* The Marine Firefighting Work Group is dedicated to three basic goals:

- a. Safety of firefighters responding to Marine Incidents.
- b. Safety of life and property of Cook Inlet Marine Industry assets.
- c. Through teamwork set a standard for exemplary response utilizing all available assets.

We will do these things by:

- a. Best available Industry Practices and technology.
- b. Working hand in hand with local, state, and federal agencies via the CIHSC.
- c. Demonstrating the outcome of the above through agreements, training, drills, standards of care and practice.

The Chair of the HSP Work Group is responsible for leading an annual review of the HSP. The annual review must be completed in time for consideration at the first committee meeting every calendar year. Solicitation for recommended changes to the HSP must be done immediately after the last meeting every calendar year and allow no less than 30 days to receive recommended changes to the HSP Work Groups or committee members can submit recommended changes to the HSP Work Group at any time. If the HSP Work Group determines that the HSP should be amended, the HSP Work Group will publish a record of changes with proposed language. The record of changes will be available for review on the website at least 30 days before a scheduled committee meeting for review by other Work Groups and the public. The committee will consider comments on the proposed revisions of the plan before voting on any motion to amend the plan.

## A.3. GUIDELINES

Standards and protocols included in the HSP address operational and environmental issues unique to Cook Inlet. The HSP is not intended to supplant or otherwise conflict with federal, state, or local regulations developed under legal authorities. Nor is the HSP intended to replace the good judgment of a ship's master in the safe operation of his/her vessel. The HSP is intended to complement existing regulations by advising the mariner of unique conditions and requirements that may be encountered in Cook Inlet and the standards and protocols developed by local experts for ensuring greater safety in light of those conditions and requirements.

# A.4. HARBOR SAFETY COMMITTEE MEMBERS

# A.4.1 List of Members

The CIHSC is a stakeholder organization. A broad based association representing the interests of each stakeholder group is invited to nominate a representative and an alternate.

## A.4.1.1Voting Members

- 1. Commercial Fishing Organizations
- 2. Marine Oil Terminal Operators
- 3. Liquid Natural Gas Carrier Operators
- 4. Cruise Ship Operators
- 5. Tug and Barge Operators
- 6. Recreational Boaters
- 7. Cook Inlet Regional Citizen's Advisory Council (CIRCAC)
- 8. Ship Agents
- 9. Offshore Oil Production Operators
- 10. Southwest Alaska Pilots Association
- 11. Port of Anchorage
- 12. Port of Homer
- 13. Salvage Organization
- 14. Response Organization
- 15. Port MacKenzie
- 16. Environmental Organization
- 17. Tanker Operators
- 18. Dry Cargo Ship Operators
- 19. Small Passenger Operators
- 20. Harbor Tug Operators

In addition to the stakeholder groups listed above, there are a number of governmental agencies that may serve on the CIHSC in a non-voting, advisory capacity and to the extent they consent to participate on the committee.

# A.4.1.2 Ex-Officio (non-voting)

- 1. U.S. Coast Guard (USCG)
- 2. U.S. Army Corps of Engineers (ACOE)
- 3. Alaska Department of Environmental Conservation(ADEC)
- 4. National Oceanic and Atmospheric Admin (NOAA)
- 5. Department of Defense, Joint Base Elmendorf Richardson (JBER)
- 6. Marine Exchange of Alaska (MXAK)<sup>1</sup>
- 7. Alaska Marine Highway System

<sup>&</sup>lt;sup>1</sup> MXAK is a non-governmental agency

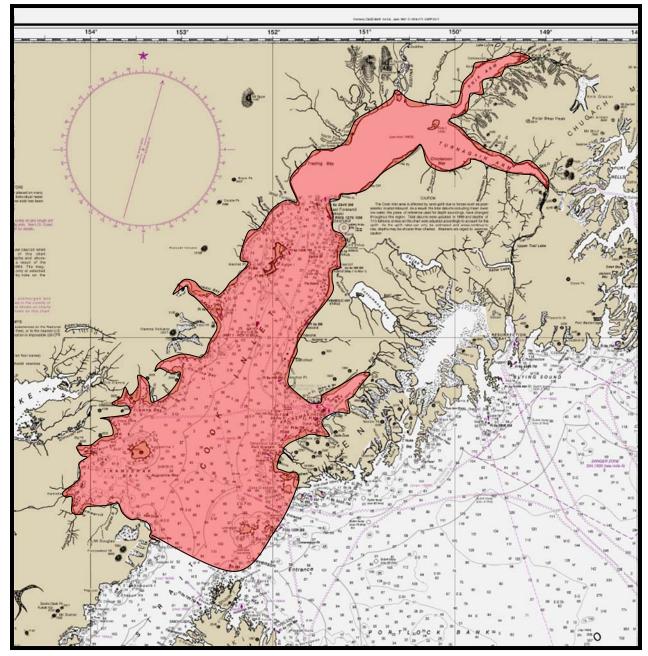
Committee membership shall not, by itself, be construed to in any way limit the legal rights, obligations, or authorities of an individual representative or the groups or agencies which they represent. For additional information please refer to the CIHSC Charter.

# SECTION B: GENERAL INFORMATION

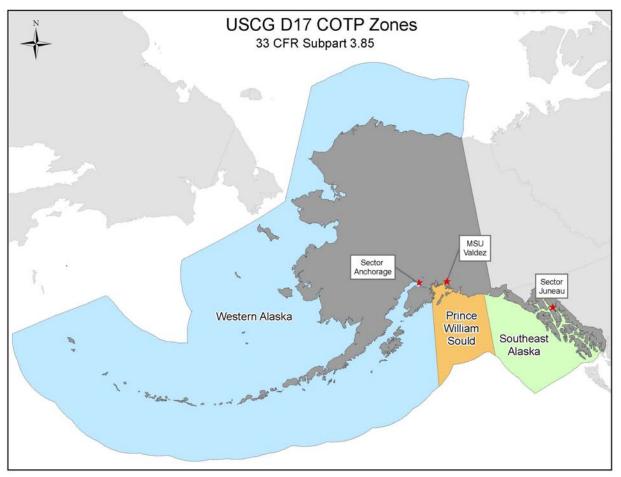
# **B.1. GEOGRAPHIC PLAN APPLICABILITY AND INFORMATION**

# **B.1.1 Geographic Boundaries**

The geographic scope of the Cook Inlet HSP will include the area encompassing the marine waters and coastal areas of Cook Inlet from the seaward boundary of a line drawn from the southernmost extremity of Kenai Peninsula at longitude 151° 44.0'W to East Amatuli Island Light; to Latax Rocks Light north of Shuyak Island; thence to the easternmost extremity of Cape Douglas. The geographic boundaries are depicted in Figure 1.



For all USCG mission areas including waterways management, marine safety, search and rescue, law enforcement, border security, port security and environmental issues in Cook Inlet, the COTP, Western Alaska is the primary USCG authority. The legal boundaries for the COTP Zone, Western Alaska are set forth in 33 Code of Federal Regulations 3.85-15 and include the waters of Prince William Sound, as depicted in Figure 2.



## Figure 2. COTP Zone, Western Alaska **B.2. USCG SECTOR COMMANDER RESPONSIBILITIES**

# **B.2.1 Captain of the Port (COTP)**

## Authority: 33 Code of Federal Regulation (CFR) 1.01-30

COTP and their representatives enforce within their respective areas port safety and security and marine environmental protection regulations, including, without limitation, regulations for the protection and security of vessels, harbors, and waterfront facilities; anchorages; security zones; safety zones; regulated navigation areas; deep-water ports; water pollution; and ports and waterways safety.

# **B.2.2 Search and Rescue Mission Coordinator (SMC)**

## Authority: 14 U.S. Code (USC) 88

In order to render aid to distressed persons, vessels, and aircraft on and under the high seas and on and under the waters over which the United States has jurisdiction and in order to render aid to persons and property imperiled by flood, USCG may:

- 1. Perform any and all acts necessary to rescue and aid persons and protect and save property.
- 2. Take charge of and protect all property saved from marine or aircraft disasters, or floods, at which USCG is present.
- 3. Furnish clothing, food, lodging, medicines, and other necessary supplies and services to persons succored by USCG.
- 4. Destroy or tow into port sunken or floating dangers to navigation.

# **B.2.3 Federal On Scene Coordinator (FOSC)**

## Authority: 40 CFR 300.120

The on-scene coordinator (OSC) directs response efforts and coordinates all other efforts at the scene of a discharge or release. As part of the planning and preparedness for response, OSCs shall be predesignated by the regional or district head of the lead agency. The Environmental Protection Agency (EPA) and the USCG shall predesignate OSCs for all areas in each region. The USCG shall provide OSCs for oil discharges, including discharges from facilities and vessels under the jurisdiction of another federal agency, within or threatening the coastal zone.

# **B.2.4 Federal Maritime Security Coordinator (FMSC)**

## Authority: 33 CFR 103.205

Without limitation to the authority vested in the COTP by statute or regulation, and in addition to authority prescribed elsewhere in this part, the COTP as the FMSC is authorized to:

- 1. Establish, convene, and direct the Area Maritime Security (AMS) Committee.
- 2. Appoint members to the AMS Committee.
- 3. Develop and maintain, in coordination with the AMS Committee, the AMS Plan.
- 4. Implement and exercise the AMS Plan.
- 5. Maintain records required by 33 CFR 103.520.

# **B.2.5 Officer in Charge Marine Inspection (OCMI)**

## Authority: 33 CFR 1.01-20

OCMI has been designated and delegated to give immediate direction to USCG activities relating to marine safety functions consisting of inspection of vessels in order to determine that they comply with the applicable laws, rules, and regulations relating to construction, equipment, manning, and operation, and to be satisfied that such vessels are in seaworthy condition for the

services in which such vessels are to be operated; shipyard inspections; factory inspections of materials and equipment for vessels; the licensing, certificating, shipment and discharge of seaman; investigations of marine casualties and accidents; investigations of violations of law; negligence, misconduct, incompetence or misbehavior of persons holding licenses, certificates, or documents issued by USCG; initiations of actions seeking suspension or revocation under 46 USC 77 of licenses, certificates and documents held by persons, and presentation of cases at hearings before Administrative Law Judges; and the enforcement of navigation, vessel inspection and seaman laws in general.

## **B.3. ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION** (ADEC) RESPONSIBILITIES

Alaska Statutes (AS) 46.03.010 is ADEC Declaration of Policy. It outlines the strategy, priority and authority for environmental protection and pollution control in the state. Additionally, it calls for federal, as well as local, third party and even individual coordination and cooperation to manage water, land, and air resources.

40 CFR 300, the National Contingency Plan, calls for each State Governor to designate a lead agency to direct state-lead response operations. For the State of Alaska, the Governor has designated ADEC. In turn, ADEC has designated the lead response official to conduct and/or coordinate response operations in concert with the federal designee; USCG COTP. ADEC is also charged with coordinating and communicating with other state and local agencies.

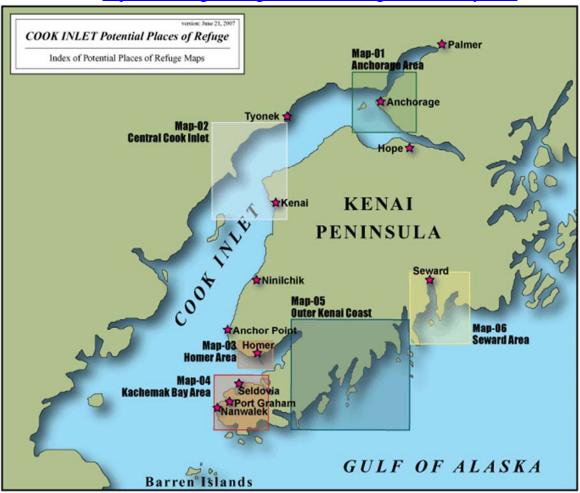
The ADEC representative(s) to the CIHSC is (are) responsible for all commercial vessel and waterways management, marine safety, port safety and environmental protection and spill preparedness and response issues in Alaska state waters, including all of Cook Inlet and the various connecting straits, bays, and sounds. ADEC Spill Prevention and Response Division's Preparedness, Prevention and Response Program is the primary state authority responsible for dealing with vessel and facility incidents, including hazardous material incidents, as they might impact state air, land, and water resources. The state's jurisdiction extends to activities occurring in the coastal waters within the U.S. territorial seas, and state interests may extend beyond those limits to the extent the event would likely impact state waters and resources.

# **B.4. POTENTIAL PLACES OF REFUGE (PPOR)**

It is important for mariners to understand the selection of PPOR in Cook Inlet. The Cook Inlet Subarea Committee has identified six PPORs to enhance the overall response process and assist vessels in selecting docking, anchoring and mooring locations. Detailed information on these locations and factors used to select them can be found on the ADEC Cook Inlet Places of Refuge Home Page:

#### https://dec.alaska.gov/spar/PPR/cookinletpor/index.htm

Kachemak Bay is a preferred PPOR for lower Cook Inlet. It is also designated as a Critical Habitat Area, managed by the Alaska Department of Fish & Game (ADFG). Anchoring in Kachemak Bay for more than 14 days requires authorization under a Special Area Permit through ADFG (5 Alaska Administrative Code [ACC] 95). Additional regulations surrounding the Critical Habitat Area can be found in the ADFG Kachemak Bay Management Plan:



http://www.adfg.alaska.gov/index.cfm?adfg=kachemakbay.main

Figure 3. Potential Places of Refuge in Cook Inlet

# **B.5. AIDS TO NAVIGATION (ATON)**

#### Action items:

- If you see an ATON discrepancy, (buoy off station, range light extinguished, etc.) contact USCG via VHF FM Radio. Your timely report could prevent an accident.
- If underway, contact USCG Sector Anchorage via VHF Channel 16 or cell phone at (907) 428-4100.
- If not underway, or if merely commenting on ATON, contact Commander, Seventeenth Coast Guard District, Ports and Waterways, either by mail (PO Box 25517 Juneau, AK 99802-1217) or by phone at (907) 463-2267.

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## **B.5.1** Caution to be Used in Reliance on ATON

The ATON depicted on charts comprise a system of fixed and floating aids that have varying degrees of reliability. Therefore, prudent mariners will not rely solely on any single aid to navigation, particularly a floating aid. With respect to buoys, the buoy symbol is used to indicate the approximate position of the buoy body and sinker, which secures the buoy to the seabed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to, inherent imprecision in position fixing methods, prevailing atmospheric and sea conditions, the slope and the material making up the seabed, the fact that the buoys are moored to sinkers by varying lengths of chain, and the fact that buoy body and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits which may occur more than a year apart. Due to the forces of nature, the position of the buoy body can be expected to shift inside and outside the charting symbol. The mariner is also cautioned that buoys are liable to be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of ice, running ice or other natural causes, collisions, or other accidents. For the foregoing reasons, a prudent mariner must not rely solely upon the position or operation of floating aids to navigation, but must also use bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy may be marking.

## **B.5.2 Required Reporting of Damaged ATON**

Vessel operators are required to notify USCG of any marine casualty or accident, including damage or destruction of aids to navigation, by the Marine Investigation Regulations, 46 CFR 4.05-20, with penalty for noncompliance. Frequently, aids to navigation are struck, causing damage and displacement or complete loss, without the knowledge of USCG. The result is diminished protection for marine traffic due to the failure of vessel operators to furnish notice of these collisions to the nearest local USCG unit as required by law and regulation. In accordance with 33 CFR 62.65, all vessel operators who witness another vessel or individual damage or destroy an aid to navigation, or believe an aid is not watching properly or is off station in accordance with USCG Light List, should make a report to USCG Sector Anchorage Command

Center at (907) 428-4100.

# **B.5.3 Private ATON**

Private ATON include all marine aids to navigation operated in the navigable waters of the United States other than those operated by the federal government or those operated in state waters for private use. No person, public body or other instrumentality not under the control of the Commandant, exclusive of the Armed Forces, shall establish and maintain, discontinue, or change or transfer ownership of any aid to maritime navigation, without first obtaining permission to do so from the Commandant; for more information consult 33CFR 66. In order to make application to establish and maintain, discontinue, change, or transfer ownership of a private ATON, a person or instrumentality shall submit a "Private Aids to Navigation Application" (CG-2554) to the Commander of the nearest USCG District. To obtain a CG-2554, write Commander (dpw), Seventeenth Coast Guard District, P.O. Box 25517 Juneau, AK 99802-1217, or call (907) 463-2028.

## **B.5.4 ATON Point of Contact**

To report an ATON that is NOT displaying the characteristics as advertised, contact the nearest USCG unit or Sector Anchorage Command Center at (907) 428-4100.

The web address to receive and/or view the Local Notice to Mariners (LNM) and the yearly Special Local Notice to Mariners (SLNM) is:

https://www.navcen.uscg.gov/?pageName=lnmMain

Note: The LNM and SLNM are produced only in an electronic format and no longer mailed.

# **B.6. ADVANCE NOTICE OF ARRIVAL (NOA)**

#### Action items:

- ➤ If bound for U.S. port, make 96-hour NOA report
- If state regulated tank vessel, the vessel operator must maintain a copy of the Oil Discharge Prevention and Contingency Plan onboard and provide a proof of State of Alaska Certificate of Financial Responsibility (COFR) to ADEC prior to entering state waters (18 AAC 75.465(e)).
- If state regulated non-tank vessel, the vessel operator must maintain a copy of the approved non-tank vessel plan on board, and provide a proof of COFR prior to entering state waters (AS 46.04.055(a)).

## **B.6.1 U.S. Requirements - Overview**

After the terrorist attacks on the U. S. on September 11, 2001, USCG recognized the need to improve Maritime Domain Awareness (MDA) and thereby enhance maritime homeland security (MHLS) by increasing the required advance notice of arrivals for ships entering into U.S. waters from 24 hours to 96 hours, and the amount of information to be reported. These revised USCG NOA regulations (33 CFR 160, Subpart C) significantly expanded cargo and recent vessel transit information requirements, increased the time required for providing an advance notice, and revised the reporting process to include a central collection point (that is, the National Vessel Movement Center). These improvements contributed significantly to USCG's intelligence and security efforts. The rules are found at 33 CFR 160.201-215.

There are three main purposes for requiring information in advance of a vessel's arrival. One is for waterways management, another is for assessing maritime safety, and the last is for maintaining homeland security. The data contained in the NOA is considered vital to these missions.

## **B.6.2** Applicability

The NOA requirements generally apply to all U.S. commercial vessels except:

- 1. U.S. recreational vessels.
- 2. Oil Spill Response Vessels (OSRVs) engaged in actual spill responses or exercises.
- 3. Passenger and offshore supply vessels when engaged in the exploration or removal of oil, gas, or mineral resources on the Outer Continental Shelf.
- 4. A U.S. or Canadian vessel engaged in salving operations of any property wrecked, or rendering aid and assistance to any vessels wrecked, disabled, or in distress in waters specified in Article II of the 1908 Treaty of Extradition, Wrecking, and Salvage (35 Stat 2035; Treaty Series 502)
- 5. If not carrying Certain Dangerous Cargo (CDC) or controlling a vessel carrying CDCs:
  - a. A vessel operating exclusively within a single COTP zone.

- b. Towing vessels and barges operating solely between ports or places in the continental U.S. (includes Alaska but not Hawaii or Pacific Islands).
- c. Public vessels.
- d. Except for a tank vessel, a U.S. vessel operating solely between ports or places of the U.S. on the Great Lakes.
- e. A U.S. vessel 300 gross tons (GT) or less, engaged in commercial service, not coming from a foreign port or place.
- f. Ferries on fixed routes meeting the requirements of 33 CFR 160.204(a)(5)(vii), which (includes international routes).

The NOA requirements generally apply to all foreign vessels except:

- 1. A foreign vessel 300 GT or less not in commercial service if not carrying CDC or controlling a vessel carrying CDCs.
- 2. A Canadian vessel engaged in salving operations of any property wrecked, or rendering aid and assistance to any vessels wrecked, disabled, or in distress in waters specified in Article II of the 1908 Treaty of Extradition, Wrecking, and Salvage (35 Stat 2035; Treaty Series 502).
- 3. A foreign public vessel.
- 4. A foreign ferry on a fixed route as per 33 CFR 160.204(a)(5)(vii).

## **B.6.3 Force Majeure**

Vessels bound under force majeure for a U.S. port or place must now provide notice of the master's intentions, any hazardous conditions, and if the vessel is carrying certain dangerous cargo or controlling a vessel carrying certain dangerous cargo.

## **B.6.4 Certain Dangerous Cargo**

Certain Dangerous Cargo (see 33 CFR 160.202 for complete details) is as follows:

- 1. Division 1.1 or 1.2 explosives.
- 2. Division 1.5D blasting agents.
- 3. Division 2.3 poisonous gas.
- 4. Division 5.1 oxidizing materials.
- 5. Liquid Division 6.1 poisonous materials.
- 6. Class 7 radioactive material.
- 7. Bulk liquefied gas carried under 46 CFR 151.50-31 or listed in 46 CFR 154.7.
- 8. That is flammable or toxic and that is not carried as CDC residue.
- 9. Except when not carried as CDC residue, bulk liquid acetone cyanohydrin, allyl alcohol, chlorosulfonic acid, crotonaldehyde, ethylene chlorohydrin, ethylene dibromide, methacrylonitrile, oleum (fuming sulfuric acid), and propylene oxide.
- 10. Ammonium nitrate Division 5.1 material (not CDC residue).
- 11. Ammonium nitrate Division 5.1 fertilizer (not CDC residue).
- 12. Note: CDC residue does NOT include the following cargoes (they remain treated as CDCs):
  - a. Ammonium nitrate in bulk and ammonium nitrate based fertilizer exceeding 1000 lbs total and/or individual quantities over 2 cu ft, even if all saleable cargo is discarged

- b. Anhydrous ammonia
- c. Chlorine
- d. Ethane
- e. Methane (Liquid Natural Gas)
- f. Sulfur dioxide
- g. Vinyl chloride

## **B.6.5 NOA Time Requirements**

The time requirements are based on the vessel's voyage time to the intended port or place of destination, not the first entry point into U.S. waters.

- 1. If voyage time is 96 hours or more, submit NOA 96 hours prior to intended arrival time.
- 2. If voyage time is 96 hours or less, submit NOA before departure but at least 24 hours before arriving at the port or place of destination.
- 3. Towing vessels in control of a vessel carrying CDC and operating solely between ports or places of the contiguous U.S. and/or Alaska, must submit an NOA before departure but at least 12 hours before arriving at the port or place of destination.
- 4. U.S. vessels 300 GT or less, arriving from a foreign port or place, if voyage time is 24 hours or less, must submit NOA at least 60 minutes before departure from the foreign port/place.
- 5. Canadian vessels 300GT or less, arriving directly from Canada via boundary waters, if voyage time is 24 hours or less, must submit NOA at least 60 minutes before departing the Canadian port or place.
- 6. Updates Required:
  - a. If remaining voyage time is 96 hours or more, or less than 96 but more than 24 hours remain, an update must be provided as soon as practicable but at least 24 hours before arriving at the port or place.
  - b. If remaining voyage time isles than 24 hours, then an update must be provided as soon as practicable but at least 12 hours before arriving at the port or place.
- 7. Updates not required:
  - a. Changes in arrival or departure times of less than 6 hours.
  - b. Changes in vessel location or position at the time of reporting.
  - c. Changes to crewmembers' positions or duties.

## **B.6.6 Reporting Methods and Coast Guard/Customs and Border Protection** (CBP) Alignment

Vessels must report their NOAs electronically (eNOA) to the National Vessel Movement Center (NVMC) through the NVMC website:

#### http://www.nvmc.uscg.gov

The electronic submission automates the reporting and vetting system. In addition, when a vessel sends an eNOA to the NVMC, the NOA is automatically sent to CBP's Advanced Passenger Information System (APIS). CBP requires all commercial vessels to submit a NOA when arriving from a foreign port or place.

# **B.6.7 NOA Reporting Process**

When a vessel submits a NOA, the information is processed by the NVMC. It is first validated (for completion and some accuracy) by the NVMC. It then is entered into a database. From there, vetting and scrutiny for each arrival notice occurs on two levels. First, USCG's Intelligence Center analyzes each notice of arrival for security purposes. Second, each USCG Sector or unit analyzes the notice of arrival for both safety and security purposes. If there is a safety or security concern with the vessel, it may be boarded or inspected by USCG.

## **B.6.8 NOA Point of Contact**

For common questions and regulatory interpretations, visit the USCG Homeport:

## http://homeport.uscg.mil.

Navigate to "Port State Control", then "General Information", then "Notice of Arrival and Departure (NOAD) Questions and Interpretations."

For questions about your NOA (how to submit, whether it was submitted, technical questions) contact:

## National Vessel Movement Center

24-hour phone line: 1-800-708-9823 or 304-264-2502 Email Address: sans@nvmc.uscg.mil Fax Number: 800-547-8724 or 304-264-2684

# **CBP Marine Desk – Anchorage International Airport** 24-hour phone line: (907) 271-6313

## **CBP** Process and Vetting

APIS – Maritime Carrier Account Manager 409-727-0285; Ext 238

## **B.6.9 Where to Call Examples**

| QUESTION/PROBLEM                                  | POINT OF CONTACT |
|---|------------------|
| When do I have to submit my NOA?                  | NVMC             |
| Do I have to submit a NOA?                        | NVMC             |
| I sent an eNOA, but don't know if it got there    | NVMC             |
| Was my departure notice received?                 | CBP              |
| I can't get in touch with local CBP unit          | CBP              |
| What time do I have to submit my NOD?             | NVMC             |
| What if I can't submit my NOD 60 minutes prior to | NVMC             |
| departure?  |                  |
| Is my NOA complete?                               | NVMC             |

| Is my vessel cleared to enter the port? | USCG Sector Anchorage |
|---|-----------------------|
| I am having trouble submitting my eNOAD | NVMC                  |

The CIHSC and the USCG recommend that any foreign-flag vessel and/or large deep-draft vessels contact a competent local agent. A local vessel agency acts as a conduit to the many government agencies and non-governmental organizations that provide oversight in Cook Inlet. A competent local vessel agency is essential to the following:

- 1. Pre-arrival communication for disseminating port requirements, current conditions, vessel traffic, special operating issues, regulatory requirement, cold weather mitigation, security issues,
- 2. Many local agents are cross-trained in spill mitigation as part of an Incident Management Team.
- 3. Communication issues such as Advance Notice of Arrival, Asian Gypsy Moths requirements/reporting etc. are important as failure to adhere to the regulations could cause the vessel to be required to anchor and/or depart the area and thus expose the vessel and environment to unnecessary risk.

# **B.7. LOCAL NOTICE TO MARINERS (LNM)**

The Seventeenth USCG District publishes a weekly LNM which includes Light List and Chart updates. Use this LNM to keep your Light List and nautical charts current. The LNM covers aids to navigation, charts, channel depths, marine construction, military operations, bridge repair/construction, significant marine events and other information of interest to mariners. The web address to receive and/or view the LNM and the yearly Special Local Notice to Mariners (SLNM) is:

http://www.navcen.uscg.gov/?pageName=lnmDistrict&region=17

Note: The LNM and SLNM are produced only in an electronic format and no longer mailed.

Mariners are urged to take advantage of automatic chart distribution as a quick and easy way to ensure the most up to date charts are on board.

Note: NOAA Electronic Navigational Chart (ENC) numbers are listed for vessels navigating using Electronic Chart Display and Information Systems (ECDIS) that comply with International Maritime Organization (IMO) requirements for Safety of Life at Sea (SOLAS) classed vessels.

# **B.8. COMMUNICATIONS: EMERGENCY & RESPONSE**

# **B.8.1 Introduction**

This document is designed to assist foreign and domestic commercial vessels to easily communicate with appropriate agencies regarding various emergencies and/or unusual situations while transiting Cook Inlet. This document is not intended to suggest a departure from existing procedures set forth by the International Telecommunication Union, International Maritime Organization and Federal Communications Commission for the handling of Distress or Urgency communications. The Cook Inlet region is served by the USCG Sector Anchorage Command Center. Commercial vessels should familiarize themselves with the areas of responsibility and appropriate working frequencies of the command center.

# **B.8.2 Safety of Life at Sea (SOLAS)**

SOLAS is of primary importance to the various agencies in Cook Inlet. Types of incidents include injury to crewman or accidents on the vessel that threaten the crew or others. Such reports trigger joint responses by Search and Rescue organizations as well as the USCG in U.S. waters.

## **Action Items:**

- U.S. Waters Contact USCG Sector Anchorage Command Center for search and rescue or for suspicious activity (security threats), ship emergencies (fire, salvage, oil spill, propulsion/steering problems etc.).
- National Response Center (NRC) Contact NRC for release or potential release of oil of hazardous materials into water at 1-800-424-8802
- ADEC Contact ADEC Oil Spill Reporting Hotline for release or potential release of oil or hazardous materials into state waters at (907) 269-3063 or 1-800-478-9300.

# **B.8.3 Marine Casualties and Other Reportable Events**

This includes collisions, anchor dragging, grounding, oil spills and hazardous material releases of any amount, equipment casualties, loss of propulsion and any other situation which results in the loss of vessel control or possible loss of control, but does not immediately put lives at risk. NOTE: The COTP will not permit drifting, i.e. intentional or unintentional vessel movement without propulsion control. Vessels are expected to have fully functioning propulsion and steering while underway or at anchor, or a standby/escort tug(s) will be required.

#### **Action Items:**

- ➢ For any marine casualty, contact the following:
  - COTP through the Sector Anchorage Command Center (907) 428-4100 or VHF Channel 16
  - ADEC Oil and Hazardous Substance spill hot line at (907) 269-3063 during normal business hours or 1-800-478-9300 after normal business hours.

## **B.8.4 VHF Channels**

Channel 16: International Distress and Calling. For Distress, Urgency and Safety traffic and general calling. (Vessels subject to Bridge to Bridge Radiotelephone Act and Vessel Traffic Service are not required to maintain a watch on Channel 16.)

Channel 22A: USCG Liaison. USCG does not normally monitor channel 22A so you must first establish contact on channel 16.

Channel 13: Bridge to Bridge. For passing and safety communications between vessels.

Always reduce interference by using low power transmission when practicable.

# **B.9. FISHING NET CONFLICT RESOLUTION**

#### **Action Items:**

- Vessels engaged in fishing must comply with the 72 COLREGS and should not obstruct navigable channels.
- Deep draft vessels should proactively verify in advance that channels are clear before transiting.
- > Parties shall work together to solve conflicts prior to calling USCG.
- Using a non-fishing vessel to move obstructing nets is a last resort and is not always a timely process.

# **B.9.1** Objective

Public safety is one of USCG's primary missions and safety of navigation will always be of paramount concern. This guidance is applicable to all waters of Cook Inlet.

Vessel operators should coordinate with fishermen ahead of time by calling them directly or hailing them on established marine radio channels to ensure they are aware of planned vessel movements.

If commercial fishing gear extends into a navigable channel and presents an obstruction or hazard to navigation, vessel operators should report the situation to USCG. Vessel operators are required to maintain safe and positive control of their vessels in accordance with the International Regulations for Preventing Collisions at Sea 1972 Navigation Rules (72 COLREGS) until the obstruction can be mitigated. On a case by case basis, inbound vessels may be directed by the COTP to proceed to anchorages or modify transit schedules in order to effectively mitigate the obstruction.

# **B.9.2 USCG Policy**

USCG has the legal authority to order movement of any vessel and other hazards to navigation when they create a significant safety hazard. It is the USCG's policy that fishing nets, moored or fleeted barges, or any other obstruction shall not prevent the safe passage of vessels in a navigable channel.

Vessels engaged in fishing shall adhere to the requirements of 72 COLREGS, in particular, rules 9 and 10.

It is the responsibility of the Master of a vessel to ensure the safe navigation of their vessel in narrow channels. Masters of vessels that are constrained by the draft, length, width, or maneuverability of their vessel should use any available resources including the vessel's owner or agent, the appropriate port, and the COTP's office, to ensure that the channel is safe to navigate prior to entering a channel.

It is the responsibility of the fishermen and barge owners/operators to ensure that reasonable measures are taken to maintain the safe navigability of a channel. The fishermen must deploy their nets in accordance with all applicable regulations. Barge owners must limit the width of

multiple moored/fleeted barges, as practicable, to minimize the impact on the available channel.

When an obstruction has been identified, USCG will expect that responsibility to alleviate the problem lies with the parties involved and they shall act in a timely fashion to clear the navigational obstruction(s) themselves. Early and proactive communication between concerned parties will greatly increase safety and promote efficient commerce.

If the matter cannot be resolved between the affected parties, the COTP may assist in clearing an obstruction or direct parties to take action to remove it.

# **B.10. PILOTAGE**

The sensitive marine environment, severe winter weather, and large size of vessels transiting Cook Inlet require experienced marine pilots. Southwest Alaska Pilots Association (SWAPA) pilots are examined, licensed, overseen and disciplined by both USCG and the Alaska Board of Marine Pilots. Both of these agencies have full investigatory and license suspension and revocation powers.

SWAPA provides marine pilots to vessels transiting Cook Inlet. The State of Alaska, under AS 08.62.157, requires marine pilots "to safely navigate vessels under the pilot's direction and control and to protect life and property and the marine environment while engaged in the provision of pilot services." All waters of Cook Inlet inside a line extending from Cape Douglas to the western tip of Perl Island then northward to the shoreline of the Kenai Peninsula are compulsory pilotage waters for vessels subject to AS 08.62.

Under 12 AAC 56.110, vessels are excluded from the use of a state licensed marine pilot in compulsory pilotage waters when proceeding directly between points outside Alaska and an established pilot station for the express purpose of embarking or disembarking a pilot travel via Cook Inlet to the Homer Pilot Station.

Note: vessels are not allowed to enter pilotage waters and heave to while awaiting time adjustment to arrive at the pilot station.

## Action Items:

- To arrange pilotage, an agent, owner, or master of a vessel shall inform SWAPA of a vessel movement at least 36 hours before the movement in order to provide sufficient time for a pilot to arrive at the vessel by the available means of transportation. An agent, owner, or master of a vessel shall again inform SWAPA at least 24 hours before the movement. See contact information below.
- Inbound vessels are requested to establish contact with the Pilot Station on VHF Channel 10 (KCE 203 Southwest Pilots) one and a half (1.5) hours prior to arrival off the Homer Spit. Contact the pilot boat on Channel 10 a half (0.5) hour prior to arriving off the Homer Spit.
- A pilot ladder is to be rigged in compliance with SOLAS regulation 17, Chapter 5 on the leeward side about one (1) meter above the water.
- Pilot Boarding: As vessels approach the pilot station, 1.0 miles 180° true from Lands End Light; approximate position 59° 35' North latitude, 151° 25' West longitude, they should be prepared to make a lee for the pilot boat should sea conditions require it AND the pilot boat request it. During certain conditions of SW winds and seas, vessels may be requested to proceed past Coal Point and turn north to make a lee for boarding. Vessels are requested to proceed at a safe speed of about 8-10 knots during embarkation with the propeller stopped when the pilot is on the ladder.

There are two pilot boats based in Homer. The MARY DELE is a 36 foot steel hull vessel and the KATMAI is a 55 foot aluminum hull vessel. See Figures 4 and 5.



Figure 4. Pilot vessel KATMAI

Figure 5. Pilot vessel MARY DELE

For more detailed information about pilotage services: Southwest Alaska Pilots Association

| (907) 235-8783           |         |
|--------------------------|---------|
| <u>swapa@alaskan.com</u> |         |
| swpilots@ak.net          |         |
| 156.5 VHF Channel 10     | KCE 203 |
| 156.8 VHF Channel 16     | KCE 203 |

PILOT LADDERS ALL STATIONS: Pilot ladders must comply with IMCO, SOLAS and USCG requirements. Vessels equipped with air powered pilot hoist should check the apparatus for proper operation both up and down. Place the pilot ladder clear of scupper plug discharge drains. During winter months, keep the ladder protected on deck until ready for use to prevent ice accumulation on the ladder. Man ropes and boat ropes are not required unless requested,

however a heaving line should be made ready for the pilots bag.

## **B.11. SMALL VESSELS AND MARINE EVENT MANAGEMENT**

#### **Action Items:**

Be alert for marine events in progress, especially during the summer months when boating is popular.

USCG, under the authority of Title 33 CFR Part 100, is given the responsibility of overseeing marine events. The event sponsor has the primary responsibility of ensuring that the event is conducted in a safe and orderly fashion, so as to minimally impact other waterway users. For entities planning to stage marine events, permit applications must be submitted to USCG Sector Anchorage at least 135 days in advance. Upon consultation, the COTP may issue additional restrictions.

While there are no recurring marine events that have been permitted by USCG in Cook Inlet, there are several areas that see a concentrated amount of small recreational vessel traffic. In particular, the mouth of the Kenai River and Kasilof River are popular recreational boating locations, especially during the Cook Inlet Personal Use Salmon Fishery that occurs during the months of June, July, and August. Both dipnetting and gillnetting are permitted at the mouth of both rivers, and attract a large number of small vessels and recreational boating traffic. For specific times and openings, please visit the Alaska Department of Fish and Game (ADFG) website:

#### http://www.adfg.alaska.gov/index.cfm?adfg=PersonalUseByArea.main

Small vessel traffic also occurs in lower Cook Inlet operating out of Homer, Anchor Point, Ninilchik, Kasilof, and Kenai where recreational and charter fishing boats often access the western part of Cook Inlet.

Small vessels, tankers, fast containerships, tugs with barges in tow, ferries, and other commercial vessels share the Cook Inlet waters. They frequently encounter large wakes and fog. All this creates the potential for serious marine accidents. Small vessel operators must be aware of and comply with their obligations under COLREGS 72 (Rules of the Road), specifically Rule 9, Narrow Channels. Additionally, small vessel operators should realize that large commercial vessels cannot stop or alter course quickly, and therefore cannot easily avoid a collision with smaller, more maneuverable vessels. Large vessel crews also have trouble seeing small vessels because of wave patterns, a setting or rising sun, physical size of small vessels such as kayaks or outboards or jet skis, the height of eye of the observer on the larger ship, and containers or other cargo carried on deck that can cause blind spots that often extend ahead of the vessel.

The committee supports continued local efforts to educate small vessel operators about the potential hazards to both themselves and to commercial vessels when they operate in the Cook Inlet area, in the port approaches, and near large commercial vessels.

# **B.12. AUTOMATIC IDENTIFICATION SYSTEM (AIS)**

AIS is a system used by ships and Vessel Traffic Services (VTS) principally for identifying and locating vessels to aid maritime safety and environmental protection. AIS helps to resolve the difficulty of identifying ships when not in sight (e.g., in fog, at distance, etc.) by providing a means for ships to automatically exchange identification, position, course, speed, and other ship data with all other nearby ships and VTS stations.

The International Maritime Organization's (IMO) International Convention for the Safety of Life at Sea requires AIS to be fitted aboard international voyaging ships of 300 or more GT, and all passenger ships regardless of size.

The Marine Exchange of Alaska (MXAK) has developed the terrestrial AIS network in Cook Inlet that is used by the Coast Guard, State of Alaska, and the maritime community. It provides real time and historical information on vessels' locations to aid safe, efficient and environmentally sound maritime operations. MXAK AIS receiving sites are located at the Port of Anchorage, Kenai, Nikiski, Anchor Point and Homer. AIStransmitters (AIS ATONS) and weather stations have also been installed at Anchorage, Nikiski and Homer, broadcasting weather and navigational information to mariners over AIS and via the internet.

Since 2003, USCG has required that USCG-type approved AIS be properly installed and operational on certain vessels operating within a vessel traffic service area as listed in 33 CFR 161.12(c). The AIS carriage requirements were expanded in March 2016 to all U.S. navigable waters (12 miles) to include the following vessels:

AIS Class A device on:

- 1. Self-propelled vessels of 65 feet or more in length, engaged in commercial service;
- 2. Towing vessels of 26 feet or more in length and more than 600 horsepower, engaged in commercial service;
- 3. Vessels that are certificated to carry more than 150 passengers;
- 4. A self-propelled vessel engaged in dredging operations in or near a commercial channel or shipping fairway in a manner likely to restrict or affect navigation of other vessels; and
- 5. A self-propelled vessel engaged in the movement of CDC or flammable or combustible liquid cargo in bulk that is listed in 46 CFR 30.25–1, Table 30.25–1.

Some AIS users are not updating their unit to accurately reflect voyage related information, e.g., navigation status, static draft, destination, estimated time of arrival, etc. Some users fail to properly complete certain basic information. These issues require the due diligence of the users to ensure the AIS unit is always providing proper identification information so that the AIS continues to serve the intended purpose.

AIS users are further referred to the U.S. Coast Guard Navigation Center website:

http://navcen.uscg.gov/?pageName=AISmain

Note: AIS data can be invaluable. However, as with any source of navigation information, it

should not be solely relied upon in making navigational and collision-avoidance decisions.

Further, while AIS allows for safety related ship-to-ship test messaging to communicate with others and make passing arrangements, these communications do not meet the requirements of the Vessel Bridge-to-Bridge Radiotelephone Act (33 U.S. Code 1201 et seq) for broadcasts on the designated bridge-to-bridge channel, nor do they relieve a vessel operator from the Navigation Rules requirement to sound whistle signals or display signals.

## **B.13. COOK INLET SUBSEA PIPELINES**

There are numerous platforms in the waters of Cook Inlet producing both crude oil and natural gas. Some platforms may not produce natural gas, but do receive natural gas from shore to power the platforms. Some platforms are also connected to each other to transport oil and gas from place to place. There are three main companies who own and operate platforms in Cook Inlet and they are as follows:

- 1. Hilcorp Alaska, LLC (Hilcorp)
- 2. Glacier Oil and Gas Corporation (Glacier)
- 3. Furie Operating Alaska, LLC (Furie)

There are two lines that stretch across Cook Inlet waters; Cook Inlet Gas Gathering System pipeline from East Kenai to West Kenai and Tesoro Alaska Pipeline from Kenai to Anchorage. The table below lists subsea pipelines in Cook Inlet. Keep in mind that this is not an exhaustive list and may not account for some lines that has been abandoned between 1964 and 2017. There are approximately 48 subsea pipelines. Figure 6 is a map of Cook Inlet Platforms and Infrastructure.

| PIPELINE FACILITY                            | SHORE<br>FACILITY         | LENGTH<br>(Miles) | DESCRIPTION             | OWNER   |
|--|---------------------------|-------------------|-------------------------|---------|
| Anna to Bruce Platform                       | Granite Point<br>Facility | 1.62              | Oil                     | Hilcorp |
| Anna to Bruce Platform                       | Granite Point<br>Facility | 1.62              | Gas                     | Hilcorp |
| Anna Platform to Shore                       | Granite Point<br>Facility | 19.9              | Gas                     | Hilcorp |
| Anna Platform to Shore                       | Granite Point<br>Facility | 19.9              | Abandoned               |         |
| Bruce Platform to Shore                      | Granite Point<br>Facility | 3.4               | Oil                     | Hilcorp |
| Bruce Platform to Shore                      | Granite Point<br>Facility | 3.4               | Gas                     | Hilcorp |
| Granite Point Platform to Shore              | Granite Point<br>Facility | 6                 | Oil                     | Hilcorp |
| Granite Point Platform to Shore              | Granite Point<br>Facility | 6                 | Gas                     | Hilcorp |
| Spark Platform to Shore                      | Granite Point<br>Facility | 7.2               | Oil<br>(Not in Service) | Hilcorp |
| Spark Platform to Granite<br>Point Tank Farm | Granite Point<br>Facility | 7.2               | Gas                     | Hilcorp |
| Spurr Platform to Shore                      | Granite Point<br>Facility | 8.4               | Oil<br>(Not in Service) | Hilcorp |
| Spurr Platform to Granite                    | Granite Point             | 8.4               | Gas                     | Hilcorp |

#### **Cook Inlet Subsea Pipeline Inventory**

| PIPELINE FACILITY  | SHORE<br>FACILITY                     | LENGTH<br>(Miles) | DESCRIPTION     | OWNER   |
|--|---------------------------------------|-------------------|-----------------|---------|
| Point Tank Farm  | Facility                              | (writes)          |                 |         |
| Spark to Spurr Platforms   | Granite Point<br>Facility             | 1.2               | Gas             | Hilcorp |
| West CIGGS to Granite<br>Point Tank Farm (Provides<br>fuel gas to Spark and Spurr<br>platforms.)                 | Granite Point<br>Facility             | 0.5               | Gas             | Hilcorp |
| West CIGGS to Granite<br>Point Tank Farm (Provides<br>fuel gas for Granite Point,<br>Anna, and Bruce platforms.) | Granite Point<br>Facility             | 0.5               | Gas             | Hilcorp |
| Monopod to Shore   | Trading Bay<br>Production<br>Facility | 9                 | Oil             | Hilcorp |
| Monopod to Shore   | Trading Bay<br>Production<br>Facility | 9                 | Gas             | Hilcorp |
| King Salmon Platform to Shore  | Trading Bay<br>Production<br>Facility | 7.5               | Oil             | Hilcorp |
| King Salmon Platform to Shore  | Trading Bay<br>Production<br>Facility | 7.5               | Gas             | Hilcorp |
| Grayling Platform to Shore   | Trading Bay<br>Production<br>Facility | 6                 | Oil             | Hilcorp |
| Grayling Platform to Shore   | Trading Bay<br>Production<br>Facility | 6                 | Gas             | Hilcorp |
| Dolly Varden Platform to Shore   | Trading Bay<br>Production<br>Facility | 5.3               | Oil             | Hilcorp |
| Dolly Varden Platform to Shore   | Trading Bay<br>Production<br>Facility | 5.3               | Gas             | Hilcorp |
| Steelhead Platform to Shore  | Trading Bay<br>Production<br>Facility | 6.84              | Oil             | Hilcorp |
| Steelhead Platform to Shore  | Trading Bay<br>Production<br>Facility | 6.84              | Gas<br>(Line A) | Hilcorp |
| Steelhead Platform to Shore  | Trading Bay<br>Production<br>Facility | 6.84              | Gas<br>(Line B) | Hilcorp |

| PIPELINE FACILITY                                 | SHORE<br>FACILITY                  | LENGTH<br>(Miles) | DESCRIPTION                | OWNER   |
|---|------------------------------------|-------------------|----------------------------|---------|
| Dillon Platform to Shore                          |                                    | 5.63              | Not in Service             |         |
| Dillon Platform to Shore                          |                                    | 5.63              | Not in Service             |         |
| Baker to "A" Platform                             |                                    | 2.33              | Gas                        | Hilcorp |
| Baker to "A" Platform                             |                                    | 2.33              | Not in Service             |         |
| "A" Platform to Shore                             |                                    | 7                 | Gas                        | Hilcorp |
| "B" Platform to Shore                             |                                    | 7                 | Oil                        | Hilcorp |
| "C" to "B" Platform                               |                                    | 2.3               | Oil                        | Hilcorp |
| "A" to "C" Platform                               |                                    | 7                 | Gas                        | Hilcorp |
| "C" to Dillon                                     |                                    |                   | Oil<br>(Abandoned<br>1999) | Hilcorp |
| "C" to Dillon Platform                            |                                    |                   | Gas<br>(Not in Service)    | Hilcorp |
| CIGGS to Shore                                    | Swanson River                      | 19                | Gas                        | Hilcorp |
| CIGGS to Shore                                    | Swanson River                      | 4.7               | Gas                        | Hilcorp |
| Osprey Platform to Shore                          | Kustatan<br>Production<br>Facility |                   | Oil                        | Glacier |
| Shore to Osprey Platform                          | Kustatan<br>Production<br>Facility |                   | Gas                        | Glacier |
| Julius R Platform to Shore                        |                                    |                   | Oil                        | Furie   |
| Shore to Julius R Platform                        |                                    |                   | Gas                        | Furie   |
| Kitchen Light Unit 1<br>Platform to Shore         |                                    |                   | Gas                        | Furie   |
| Tesoro Alaska Pipeline from<br>Kenai to Anchorage |                                    |                   | Oil<br>(Refined Oil)       | Tesoro  |

Note:

CIGGS – Cook Inlet Gas Gathering System

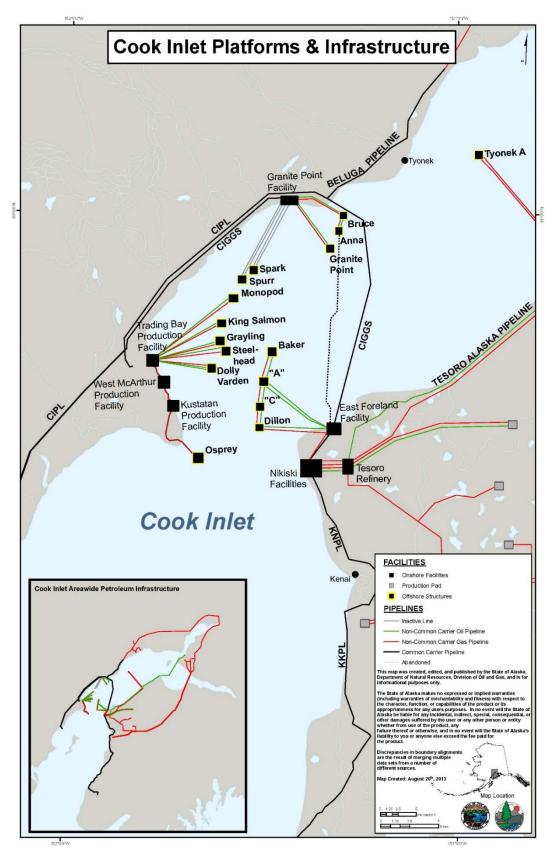


Figure 6. Cook Inlet Platforms and Infrastructure

### **B.14. SEASONAL/GENERAL FISHING ACTIVITY IN COOK INLET**

The following table provides seasonal information on the major commercial fisheries. All fishing seasons are subject to emergency opening and closure, and most seasons are only open for a portion of the time specified in the regulations. Also, fishing regulations and seasons can change from year to year. Specific information on which species are currently being harvested may be obtained from the Alaska Department of Fish and Game's (ADF&G) Division of Commercial Fisheries in Anchorage:

http://www.adfg.alaska.gov/index.cfm?adfg=fishingCommercial.main

Commercial fishing in the federal waters of the Cook Inlet and the Gulf of Alaska are managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska:

https://www.npfmc.org/wp-content/PDFdocuments/fmp/GOA/GOAfmp.pdf.

Information on current fishery activity in federal waters (3nm to 200nm off Alaska) can be found on the NOAA fisheries webpage or by calling NMFS Sustainable Fisheries Division at 907-586-7519.

http://alaskafisheries.noaa.gov/

Economically speaking, the salmon fishery is the most important commercial harvest activity. The upper Cook Inlet sockeye drift net fishery generally brings the greatest cash return. Set net and pink salmon seine harvests are economically significant as well. The lower Cook Inlet groundfish fishery is also productive.

Additional information on fishing activity in Cook Inlet can be found in the *Cook Inlet Subarea Plan, Section D Sensitive Areas*. Electronic version of the plan can be found at the following website:

http://dec.alaska.gov/spar/PPR/plans/scp\_ci/CISCP\_D-Sensitive\_Areas\_Jan2017.pdf

|                       |       |        |         |             |           |           | U         |          |           |         |         |       |
|-----------------------|-------|--------|---------|-------------|-----------|-----------|-----------|----------|-----------|---------|---------|-------|
| SALMON                | JAN   | FEB    | MAR     | APR         | MAY       | JUNE      | JULY      | AUG      | SEPT      | OCT     | NOV     | DEC   |
| Upper Cook Inlet      |       |        |         |             |           |           |           |          |           |         |         |       |
| Chinook               |       |        |         |             |           | Gill      | net       |          |           |         |         |       |
| coho                  |       |        |         |             |           |           | (         | Gillnet  |           |         |         |       |
| pink                  |       |        |         |             |           |           | Gil       | Inet     |           |         |         |       |
| sockeye               |       |        |         |             |           |           | Gillne    |          |           |         |         |       |
| chum                  |       |        |         |             |           |           | Gil       | net      |           |         |         |       |
| Lower Cook Inlet      |       |        |         |             |           |           |           |          |           |         |         |       |
| pink                  |       |        |         |             |           |           | Gillnet   | /Seine   |           |         |         |       |
| sockeye               |       |        |         |             |           | Gilln     | et/Sein   | е        |           |         |         |       |
| chum                  |       |        |         |             |           | (         | Gillnet/S | Seine    |           |         |         |       |
| HERRING               | JAN   | FEB    | MAR     | APR         | MAY       | JUNE      | JULY      | AUG      | SEPT      | OCT     | NOV     | DEC   |
| sac roe and food/bait |       |        |         |             | Gillnet   |           |           |          |           |         |         |       |
| SHELLFISH             | JAN   | FEB    | MAR     | APR         | MAY       | JUNE      | JULY      | AUG      | SEPT      | OCT     | NOV     | DEC   |
| razor clam            |       |        |         |             |           | Sł        | novel     |          |           |         |         |       |
| hardshell clam        |       |        |         |             |           |           | R         | ake      |           |         |         |       |
| scallop               |       |        |         |             |           |           |           |          | Dred      | qe      |         |       |
| GROUNDFISH            | JAN   | FEB    | MAR     | APR         | MAY       | JUNE      | JULY      | AUG      | SEPT      | OCT     | NOV     | DEC   |
| Pacific cod           | Par   | allel  |         | Sta         | ite wate  | ers (Pot  | t/Jig)    |          | Pa        | rallel  |         |       |
| rockfish              | Bycat | ch onl | y (mand | l. full ret | tention a | all year) |           |          | Jig (dire | ected)  |         |       |
| lingcod               |       |        |         |             |           |           | Jig (d    | directed | d)/Longl  | ine (by | catch ( | only) |

# **Cook Inlet Commercial Fishing Season**

# SECTION C: STANDARDS OF CARE

# **C.1. WHAT ARE STANDARDS OF CARE?**

Standards of Care (SOC) are the procedures and practices, beyond regulatory requirements, that experienced and prudent maritime professionals follow to ensure safe, secure, efficient and environmentally responsible maritime operations.

Formalized SOC are "good marine practices" that are developed and published to provide a guide for maritime professionals to consider and incorporate into their decision-making process.

SOC are not regulations and thus not enforceable. In some special circumstances, they may not be the best course of action to take. Alternative procedures may be more appropriate.

Mariners should be mindful that if they are involved in a maritime incident when not following relevant SOC they could be subject to legal action based on a rebuttable presumption of negligence.

These SOCs are not all inclusive. They complement the laws and regulations and should they seem to conflict with law or regulation, the law or regulation is always superior.

# C.2. ANCHORING IN COOK INLET

# **C.2.1 General Information**

Vessels at anchor shall observe all Port Tariffs, COLREGS, State of Alaska, and USCG regulations and procedures for anchoring in U.S. waters. This SOC is not intended to replace existing company and vessel procedures; it simply institutionalizes sound marine operating practices that responsible vessel operators follow voluntarily.

# C.2.2 Applicability

All vessel owners and operators are subject to lawful directions of the COTP under Title 33 CFR Part 160, as well as those of the State of Alaska. All waterborne craft shall practice safe navigation and prudent seamanship, including all necessary precautions to prepare for heavy weather. In addition, the standards of care below apply specifically to the following commercial vessels:

- 1. Power-driven vessels of 20 meters (approximately 66 feet) or more in length.
- 2. Towing vessel of 8 meters (approximately 26 feet) or more in length.

General Anchorages are intended for the use of commercial deep draft vessels over 200 feet (approximately 61 meters) in length. This includes Articulated and Integrated Tug Barge combinations, and Government vessels.

# **C.2.3 Actions in All Weather Conditions**

#### **Action Items:**

- At all times, monitor VHF Channel 16 for USCG Sector Anchorage and VHF Channel 13 for vessel bridge-to-bridge navigation safety communications.
- For additional information or to report emergencies, contact USCG Sector Anchorage Command Center on VHF Channel 16 or by telephone at (907) 428-4100.

The following is a description of what the COTP expects vessel owners and operators to do with respect to anchored vessels during various weather conditions. Vessels covered by Title 33 CFR Part 164.19 are reminded that these regulations are in effect at all times. The COTP, through the USCG Sector Command Center, may notify relevant industry members via fax, email, telephone, or VHF marine radio if and when any of the following preventive measures should be implemented. These measures may be advisory in nature or may consist of a COTP Order directing certain actions to be taken. Any lack of prompt notification in no way lessens the responsibility of owners, operators, and masters to take appropriate action.

Sector Anchorage's Marine Safety Information Bulletins (MSIBs) provide information to mariners about a variety of issues, including regulatory interpretations, policies, procedures and guidance. Local MSIBs are distributed to interested port stakeholders and publicly listed at the following link:

http://www.uscg.mil/d17/sectoranchorage/msib.asp

# C.2.3.1 All Weather Visibility

#### **Action Items:**

- At all times, monitor VHF Channel 16 for USCG Sector Anchorage and VHF Channel 13 for vessel bridge-to-bridge navigation safety communications.
- Maintain a 24-hour bridge watch by an English speaking individual.
- > Confirm vessel's position and under keel clearance at a minimum of once per hour.

# <u>C.2.3.2 Gale Warnings</u> (sustained winds or frequent gusts between or exceeding 34 – <u>47 knots</u>)

#### Action Items:

- > All of the actions in C.2.3.1. above plus:
- > The bridge watch must be maintained by a licensed English speaking deck officer.
- > Maintain a listening watch on the Bridge-to-Bridge working frequency
- Put the propulsion plant on standby and be ready to provide immediate propulsion and maneuver.
- > All vessels getting underway should exercise extreme caution.

#### C.2.3.3 Storm Warnings (sustained winds or frequent gusts exceeding 48 knots):

#### **Action Items:**

- All of the actions in C.2.3.1 and C.2.3.2. above plus:
- Consider increasing the scope of anchor chain as appropriate (use caution due to depth of water).
- Determine the availability and locations of potential stand by tugs (with appropriate size and horsepower), which could assist the vessel in holding position.
- > Assess the need for a pilot, and get one onboard if necessary.
- > Evaluate weather forecast and consider getting underway.

All reasonable efforts should be made to bring a pilot on board if vessel must get underway, or must reposition after dragging anchor. However, in an emergency, safety of personnel is paramount and lack of a pilot on board does not release the master from his obligation to take all necessary and prudent actions to protect the vessel.

# **C.2.3.4 Restricted Visibility:**

#### **Action Items:**

- > The bridge watch must be maintained by a licensed English speaking deck officer.
- Increased assessment of radar contacts.
- > Ensure all actions required in the COLREGS are complied with.

# C.3. BRIDGE TEAM MANAGEMENT (BTM)

#### **Action Items:**

- ➢ Have on the bridge at all times a deck watch officer capable of effectively communicating in English with the pilot.
- Ensure bridge resource team properly trained in BTM in accordance with the Standards for Training, Certification, and Watchkeeping for Seafarers (STCW), if applicable.
- > Ensure watch officers are properly rested per STCW and U.S. laws and regulations.

# C.3.1 Introduction

BTM prevents incidents, accidents, and oil spills by improving communication and situational awareness.

## C.3.2 Basic Components of Bridge Team Management

- 1. A watch size and structure appropriate to expected operating conditions (i.e., restricted waterways, traffic concentrations, and restricted visibility);
- 2. A watch size and structure that effectively addresses the three primary bridge functions: navigation, collision avoidance, and communication;
- 3. Clear roles and responsibilities for each bridge team member;
- 4. Clear guidelines for internal and external communications;
- 5. Procedures for navigating with a Pilot on board; and
- 6. Comprehensive voyage planning that includes chart updates, plotted tracklines, turn ranges/bearings, tide and weather information, and thorough review of all applicable Notices to Mariners.

### **C.3.3 Expectations**

While operating in Cook Inlet, vessel owners, operators, and Masters are expected to ensure that bridge watchstanders:

- 1. Are properly rested per STCW and U.S. laws and regulations, (i.e. officer in charge of the deck watch on a vessel when leaving or immediately after leaving port must have been off duty for at least 6 hours within the 12 hours immediately before the time of leaving; have not worked beyond the maximum hours in a 24 hour period). See STCW Section A-VIII, Title 46 U.S. Code Section 8104 and Title 46 Code of Federal Regulations Part 15 for details.
- 2. Are properly trained in BTM in accordance with the Standards for Training, Certification, and Watchkeeping for Seafarers (STCW), if applicable;
- 3. Practice effective BTM;
- 4. Prepare a comprehensive voyage plan for transiting Cook Inlet from entry into U.S. waters to their final berth or anchorage (and for the outbound transit);
- 5. Have on the bridge at all times a deck watch officer capable of effectively

communicating in English with the Pilot; and

6. Follow the communication procedures below.

#### C.3.4 Communication Procedures When a Pilot is Embarked

- 1. The Master should advise the Pilot, upon boarding, which members of the Bridge Team speak English, and discuss how communications between the Pilot and the Bridge Team will be handled.
- 2. The Master should discuss the voyage plan with the Pilot, and inform bridge watch standers of the Pilot's intentions and special concerns.
- 3. The Master or deck watch officer on duty should immediately advise the Pilot when, at any point in the transit:
  - a. The maneuverability of the vessel has been adversely affected;
  - b. When he or she has information necessary for the safety of the ship's transit; or,
  - c. When he or she is uncertain of the Pilot's intentions regarding the ship's movements.

### C.4. EQUIPMENT FAILURES AND EQUIVALENT LEVELS OF SAFETY

#### **Action Items:**

- A vessel's Master transiting in the Cook Inlet region shall immediately notify the COTP Western Alaska either directly of any mechanical or operational deficiency that would reduce the vessel's capabilities.
- > Masters shall *immediately* relay the following information:
  - 1. Nature of the defect, deficiency, damage, failure or breakdown of the vessel's, machinery or navigational/radio equipment
  - 2. Type of vessel, cargo and fuel capacity
  - 3. Location and proximity to land or other navigational hazards
  - 4. On-scene weather, visibility, tide, current, wind and sea state
  - 5. Traffic density
  - 6. Maneuverability of the vessel
  - 7. Proposal to mitigate the deficiency (follow the table below for proposals to the COTP)

The CIHSC and the USCG COTP Western Alaska are committed to ensuring vessels safely transit the waters of the U.S. and Cook Inlet, while also keeping these waters from environmental damage caused by vessel casualties. The COTP Western Alaska will require additional measures when necessary to provide an "equivalent level of safety" to vessels with reduced capabilities.

The following decision table serves as a guideline to vessel Masters to make timely and effective decisions to ensure an equivalent level of safety during a mechanical or operational deficiency:

| Defects/Deficiencies     | Additional Safety Measure   |
|--------------------------|---|
| Propulsion loss/reduced  | • Immediately obtain the services of an escort or a rescue tug of     |
| capabilities while       | adequate size and horsepower  |
| underway                 | • Maintain frequent communication with Sector Anchorage               |
| 5                        | Command Center and relay status of vessel and propulsion              |
|                          | capabilities  |
|                          | • Make both anchors ready for letting go                              |
|                          | • Prepare to anchor at closest anchorage or moor at nearest harbor of |
|                          | safe refuge upon direction of the COTP                                |
|                          | Correct deficiency before departing                                   |
| Loss or reduction of     | • Immediately obtain the services of an escort or a rescue tug of     |
| steering capabilities or | adequate size and horsepower  |
| ship service             | Maintain frequent communication with Sector Anchorage                 |
| generator                | Command Center and relay status of vessel and propulsion              |
| 8                        | capabilities  |
|                          | • Make both anchors ready for letting go                              |
|                          | • Prepare to anchor at closest anchorage or moor at nearest harbor of |
|                          | safe refuge upon direction of the COTP                                |
|                          | Correct deficiency before departing                                   |
| Loss of all radars       | Transit only in daylight and good visibility                          |
|                          | Maintain frequent communication with Sector Anchorage                 |
|                          | Command Center and relay status of vessel and propulsion              |
|                          | capabilities  |
|                          | • Provide additional navigation officer on bridge                     |
|                          | Correct deficiency before departing                                   |
| Gyro failure             | • Transit only in good visibility                                     |
|                          | Maintain frequent communication with Sector Anchorage                 |
|                          | Command Center and relay status of vessel and propulsion              |
|                          | capabilities  |
|                          | Provide additional navigation officer on bridge                       |
|                          | Correct deficiency before departing                                   |
| Automatic Radar          | Maintain frequent communication with Sector Anchorage                 |
| Plotting Aid (ARPA)      | Command Center and relay status of vessel and propulsion              |
| failure                  | capabilities  |
|                          | • Provide additional navigation officer on bridge to assist manual    |
|                          | radar plotting  |
|                          | Correct deficiency before departing                                   |
| Missing navigation       | • Contact agent to supply chart(s) at the pilot station               |
| chart(s)                 | contact agent to suppry chart(b) at the phot station                  |
| Propulsion/electrical    | • Obtain the services of an escort or a rescue tug of adequate size   |
| power reduction or       | and   |
| main engine              | horsepower prior to taking the plant off line and the permission of   |
| maintenance while at     | the COTP  |
| anchorage                | Maintain frequent communication with Sector Anchorage                 |
| G                        | Command Center and relay status of vessel and propulsion              |

| cupuomnes | capabilities |
|-----------|--------------|
|-----------|--------------|

## C.5. ABANDONED & DERELICT VESSELS (ADV)

#### Action Items:

Any vessel of concern should be reported to the COTP Western Alaska and the Alaska Department of Natural Resources (DNR) utilizing the Alaska's Joint Agency Vessel of Concern Reporting Form. Report sightings to the COTP, particularly if any may threaten safe navigation or public health and safety to the environment:

https://dec.alaska.gov/spar/PPR/docs/AK-VOC-Reporting-Form-20141.pdf

Neglected, abandoned, or otherwise compromised vessels can pose a substantial threat to public health and safety, the environment and navigation in Cook Inlet. Vessels of concern should be reported as soon as possible. According to state law, a state agency, municipality, or peace officer may take custody of a derelict vessel if it is immediate danger of sinking, is obstructing a waterway, or is endangering life or property (AS 30.30.090, AS 30.30.100).

#### **ADV Task Force**

The state of Alaska does not currently have a Derelict Vessel Program. An ADV Task Force was convened in 2014 by Cook Inletkeeper and Alaska Clean Harbors to bring together stakeholders in an effort to prevent and better manage derelict vessels around the state. For more information, please see the Task Force website at:

http://alaskacleanharbors.squarespace.com/derelict-vessels/

# C.6. HEAVY WEATHER

Heavy weather conditions in Cook Inlet mandate that all maritime stakeholders exercise increased vigilance and implement additional and appropriate measures to ensure the safety of ships and to protect the environment. STCW Convention and the International Safety Management (ISM) Code direct a ship's complement to effectively coordinate their activities in an emergency situation and in performing functions vital to safety or to prevent pollution.

Alaska Ocean Observing System provides real time sensors for weather data in Cook Inlet.

http://www.aoos.org/cook-inlet/

# <u>C.6.1 Deep-Draft Vessels Underway, High Risk Locations, and Vessels with</u> <u>Problem Histories</u>

#### **Action Items:**

- > Call for additional tugs or take other action early, before dangerous situations develop.
- Review approved tank vessel Oil Discharge Prevention and Contingency Plan or Non-Tank Vessel Response Plan and COFR (Vessel > 400 GT) for reporting requirements and mitigating actions

In all cases, the vessel master and pilot should make a proactive evaluation of the current and forecasted weather, and if necessary delay movement, call for additional tugs, or take other appropriate measures. Vessels which have particular attributes that introduce additional risk should be especially sensitive to environmental conditions that could affect the vessel's material and operational conditions.

Masters and Pilots should consult the Coast Pilot and other sources of local knowledge when transiting these areas, and be prepared for strong tides, currents, and weather conditions.

Vessels with problem histories are those that the COTP has noted as:

- 1. Having experienced previous propulsion control or steering problems;
- 2. Having lost anchors or damaged anchors;
- 3. Having poor or negligent operating histories.

# <u>C.6.2 Tugs With Tow Underway, High Risk Locations, Tow Configuration /</u> <u>Cargo Dependent</u>

#### **Action Items:**

- Close all watertight openings on the tug and tow.
- > Reduce speed when necessary, post extra lookouts to monitor the tow.
- Inspect terminal gear, including bridle, pendant, chafe gear, drum and brake; ensure compliance with Title 33 CFR Part 164.74.

Tug masters must be especially cognizant of the high-risk areas in Cook Inlet. Tug masters should consider the area to be transited, vessel cargo, forecasted weather conditions, and tidal/current predictions when deciding the specific tow configurations, and size and type of barges to be used. During periods of heavy weather, tug masters should follow actions covered in the "Action items" portion of this SOC.

## C.6.3 Recreational Vessels

#### **Action Items:**

- Ensure that all prudent actions have been taken to minimize water entry into the vessel.
- > Check the condition of anchor and mooring lines, pendants, chafe gear.
- Move vessels to safe areas or remove from water before severe weather.
- Prior to getting underway, check bilge or sump pump for accumulation of water, oil or oil residue.
- Prior to getting underway, check for proper operation of bilge pump, and/or bilge pump float switch.

# C.6.4 Cargo Handling, Crane Operations, Cargo Securing

Action Items: Individual facilities should develop a written heavy weather plan that address:

- > Designation of personnel to monitor weather, and assess need for additional security.
- Shore crane securing and tie down requirements (per manufacturer's instructions).
- Container/cargo height reductions and location away from the water or other hazardous areas.
- > Potential relocation and security of general operating equipment.
- > Applicable federal, state, local, as well as contractual labor safety regulation compliance.

Each individual cargo handling operation has its own unique operating concerns requiring more or less procedural oversight, depending on the complexity of the operation and its exposure to the weather elements. In any case, heavy weather procedures are a critical centerpiece of a company's emergency response plan, regardless of location in Cook Inlet. Port, pier, terminal and dock authorities, operators and/or owners are encouraged to conduct annual reviews of

internal heavy weather procedures specific to vessel/dock operations at their facilities. Procedures should be updated and distributed to key personnel to ensure the safety of employees, cargo, equipment, the public and the environment during periods of heavy weather. Procedures should cover all the items in the "Action items" portion of this SOC.

# C.6.5 Floating Plant, Dredging, Port Operations

#### Action Items:

- > Adhere to written policy for modifying/securing operations under certain weather conditions.
- ➢ Identify a safe anchorage/moorage for each job.
- > Proactively consider the activity's impact on safe navigation in all weather conditions.

Companies that conduct these types of relatively fixed operations should also be cognizant of the impact of heavy weather. Companies should develop written guidance to operations supervisors to take into account current and forecasted weather, and have specific plans for ceasing operations and moving to a safe anchorage or mooring at a specific weather threshold. Operations supervisors should be especially cognizant of how their operations impact navigable waterways. For further guidance, see the HSP Anchoring Standards of Care.

# **C.6.6 Potential Captain of the Port Actions**

#### **Action Items:**

- > Direct bunkering and lightering operations to cease.
- > Direct hazardous materials and explosives loading to cease.
- > Direct changes in mooring configuration or location for vessels at terminals.
- > Direct vessel movement including course/speed.
- Direct vessels to seek shelter and hold position.
- Require stand-by tugs or tugs in attendance.

If individuals or vessels are not taking actions to mitigate the risks posed by heavy weather, the COTP is authorized under various federal laws to take or direct certain actions, including but not limited to those described in the "Action Items" section of this SOC.

### C.6.7 Reporting Process to USCG and ADEC

Everyone can take ownership in making the waterways safe during heavy weather, just as anyone located on the water can be affected by weather induced problems. Mariners going about their business in the port should report any actual or potential problems on or near the water to the COTP at (907) 428-4100, and a spill to water to ADEC at (907) 269-3063. A timely report can expedite correction of an unsafe condition. If the USCG identifies unsafe situations, they will, if time permits, bring the situation to the attention of the responsible party. If the responsible party is not taking timely action, then the USCG will assist them by helping to identify and organize other resources. If the responsible party is not taking action, and does not

look capable or willing to do so, then the COTP or ADEC may issue directions to compel action, or take independent actions to mitigate unsafe situations. The responsible party may be liable for the costs associated with the actions required.

# C.7. HOT WORK

This standard of care in no way supersedes or is meant to take the place of applicable local requirements from the local fire prevention authority. Where requirements from the local authority are in excess of this standard, they must be met.

#### **Action Items:**

- > Follow all applicable Federal regulation requirements for hot work and confined spaces
- > Follow all State and local hot work requirements.

# C.7.1 Hot Work Defined

Flame heating, welding, torch cutting, brazing or carbon arc gouging.

Any operation which produces temperatures of 204°C (400°F) or higher.

Note: Operations not producing hot sparks or flame such as spark-producing or arc-producing tools or equipment, static discharge, friction, open flame or embers, impact, and non-explosion proof equipment such as lights, fixtures, or motors are not considered hot work unless in the presence of flammable liquids or in a flammable atmosphere.

# **C.7.2 Responsibilities**

Any hot work operation has the potential to ignite combustible or flammable materials. It is the Master's responsibility to take precautions to prevent fires caused by the exposure of combustibles to the effects of hot work.

# C.7.3 Confined Spaces – Marine Chemists

Contact marine chemists to certify confined spaces as safe for hot work. Marine chemists are also extremely valuable to use in evaluating spaces and attendant conditions for hazards.

# C.7.4 Precautions

# C.7.4.1 Cleaning and Ventilating for Hot Work

- 1. Before hot work is started, the space should be inspected, emptied of flammable cargo, cleaned, ventilated and tested to ensure the atmosphere is at least ten percent or less of the Lower Explosive Level (LEL) and that toxic concentrations are limited to the Permissible Exposure Level (PEL).
- 2. Extraneous flammable or combustible materials such as scrap wood, paper, ropes or rags should be removed from the space or moved in accordance with Occupational Safety and Health Administration (OSHA) or applicable Federal requirements, whichever is more stringent. Combustible materials that cannot be removed should be adequately protected.
- 3. Fans, blowers, motors and other such equipment utilized to ventilate atmospheres containing flammable or explosive vapors, fumes, mist or dust shall be approved,

explosion-proof equipment or intrinsically safe equipment.

### C.7.4.2 Flammable Liquids/Atmospheres

- 1. Do not perform hot work when flammable liquids or flammable atmospheres are present.
- 2. When hot work is to be performed on fuel tanks, cofferdams, voids, vent spaces or other spaces containing flammable liquids/atmospheres (e.g., paint lockers, flammable liquid storerooms), the adjacent spaces above, below and on all sides (boundary spaces) should first be inspected and tested, cleaned and ventilated or inerted as appropriate.
- 3. Hollow connections to a space can present the same hazards as the space itself. Pipes, tubes, coils or similar items that service, enter or exit a confined space should be flushed, blown, purged or otherwise cleaned before the performance of hot work on such items. If not so treated, the space should not be considered safe for hot work.
- 4. Valves to pipes, tubes or similar items should be closed, or the pipes blanked off, to prevent inadvertent discharge or backflow of material into the space.

# C.7.4.3 Fire Watch

- Hot work should only be conducted in those spaces where it is certain that no combustible materials or flammable residue exist. Even then, when flame heating, welding, torch cutting, brazing or carbon arc gouging or any operations that produce temperatures of 204°C (400°F) or higher are conducted, establish a trained fire watch at the worksite with an unobstructed view of the hot work operation.
- 2. When hot work may transmit a fire hazard into adjacent spaces by overheating the connecting deck, overhead or bulkhead, provide fire watches on both sides of the deck, overhead or bulkhead.
- 3. When more than one fire watch is appropriate, a means of communication is required; this will enable the fire watch to report hazardous conditions on the opposite side of separating structures and provided a signal to stop the work.
- 4. Fire watches on both sides of the separating structures should have and know how to use fire-extinguishing equipment suitable to the exposure.
- 5. After completion of the hot work operation, fire watches should remain on station until all hot work is cool to the touch or 30 minutes (whichever is greater), ensuring that no smoldering embers remain.

# **C.7.5 Handling Dangerous Cargo at Waterfront Facilities**

- 1. When handling dangerous cargo (all hazardous materials listed in 49 CFR 170 through 179, except those materials preceded by an "A" in the Hazardous Materials Table in 49 CFR 172.101 and all cargo listed in Title 46 CFR Part 148) at designated waterfront facilities, the provisions of 33 CFR 126.15 and 33 CFR 126.30 must be adhered to. This includes safety requirements, fire extinguishing equipment, and welding and hot work conditions.
- 2. Contact USCG Sector Anchorage at 907-428-4100 for more information.

# C.8. MOVEMENT IN RESTRICTED VISIBILITY

# C.8.1 General

Conditions of restricted visibility pose an increased risk to the mariner. As set forth in Rule 19 of the COLREGS, vessel operating in conditions of restricted visibility, not in sight of one another, shall proceed at a safe speed adapted to the prevailing circumstances, have her engines ready for immediate maneuver and, if a risk of collision exists, take avoiding action in ample time.

# C.8.2 Standards

- 1. When getting underway or transiting an area of restricted visibility the master, pilot, or vessel operator shall make a positive evaluation, including but not limited to the following operating factors:
  - a. Qualification of personnel.
  - b. Maneuvering characteristics of the vessel.
  - c. The vessels size and draft relative to the waters to be transited.
  - d. The quality of the vessels radar picture and navigational system.
  - e. Vessel traffic/congestion in the area.
  - f. Proximity of hazards to navigation to the transit route.
  - g. Weather, Tides, Currents.
  - h. Watertight Integrity.
- 2. Crews should be informed of the situation for heightened awareness.

#### **Action Items:**

Smaller vessels (vessels under 20 meters or approximately 65 feet in length) take on an increased risk in restricted visibility due to the difficulty in detecting these vessels with radar. Smaller vessels should use a radar reflector to increase the possibility of being detected by other vessels.

# **C.9. TOWING VESSEL OPERATIONS**

For the purpose of the HSP, the CIHSC notes that the American Waterways Operator's (AWO) Responsible Carrier Program (RCP) contains the standards of care that responsible towing vessel operators follow in the Cook Inlet region. Tug and barge vessels should also utilize the Pre-Arrival Checklist included as Enclosure D.4.

RCP has three principal parts:

- 1. Management and administration
- 2. Equipment and inspection
- 3. Human factors

Each part reflects the role that each of these components plays in ensuring safe and efficient vessel operations. The program is intended to serve as a template for AWO member companies and other towing companies to use in developing company specific safety programs that are consistent with applicable laws and regulations, that incorporate sound operating principles and practices not currently required by law or regulation, and that are practical and flexible enough to reflect a company's unique operational needs. The three sections of the program are meant to be used in conjunction with one another; the policies and procedures called for in the management and administration section, for example, should reflect the recommended principles and practices outlined in the equipment and inspection and human factors sections, as well as the variables of a company's trade, area of operations, size and organizational structure, and the like.

### C.9.1 Management and Administration

The management and administration section, the first section of the program, requires companies to look at nine principal aspects of their operations and to develop written company policies and procedures for each. These nine aspects are:

- 1. Vessel operating policies/procedures.
- 2. Safety policy/procedures.
- 3. Environmental policy/procedures.
- 4. Incident reporting procedures.
- 5. Emergency response procedures.
- 6. Internal audit/review procedures.
- 7. Vendor safety.
- 8. Organization/levels of authority.
- 9. Personnel policies.

# C.9.2 Equipment and Inspection

The second section of the program contains guidelines for vessel equipment and inspection, and it's divided into two parts: one for inland towing vessels and one for coastal towing vessels. In most respects, the two sets of guidelines are identical, but there are some differences that reflect the significant differences in the inland and coastal operating environments. This section of the program addresses six major areas:

- 1. Hull.
- 2. Machinery.
- 3. Firefighting and lifesaving equipment.
- 4. Navigation and communication equipment.
- 5. Rigging or towing gear.
- 6. Environmental controls.

# C.9.3. Human Factors

The last section of the program deals with human factors: manning, watchstanding and work hours, and training. The program outlines a set of comprehensive criteria to be taken into account by companies in establishing safe manning levels for their vessels. It establishes maximum work hour limits for all towing vessel personnel. And, it focuses heavily on training, requiring that all vessel crewmembers receive initial and periodic refresher training in a specified list of subjects.

Training requirements are based on the position an individual holds aboard a towing vessel, not the Coast Guard license he or she happens to hold, and these requirements cover everyone, from the captain and mate to the engineer, tankermen, and deckhands - both experienced and entry-level.

The practices and principles outlined in the RCP are, in large measure, based on principles of safe and sound operation that many companies in the maritime industry have already voluntarily embraced. This program aims to build upon that foundation by extending those practices and principles throughout the industry as a whole.

# C.10. UNDERKEEL CLEARANCE

Under-keel clearance standards shall be adhered to by all commercial vessels in Cook Inlet. These standards of care are written with the understanding that certain vessels such as tugs with uninspected barges and commercial fishing vessels are required by the very nature of their business to operate with less than these minimum under-keel clearances when in specific locations and conditions. However, operating with the hull touching or resting on the bottom is no longer considered a prudent or appropriate practice.

The determination of an appropriate minimum under-keel clearance for a specific vessel transiting a specific waterway must take into account many factors in addition to vessel draft and least depth, including but not limited to: vessel size, configuration, speed, trim, and list; the shape, size and hydrography of the waterway; and variations from predicted tidal levels.

For more information regarding underkeel clearance, in Cook Inlet, please see the United States Coast Pilot, Volume 9.

# **C.11. ICE OPERATIONS IN COOK INLET**

Ice season in Cook Inlet occurs during each winter from November through April. Ice typically forms between November and is gone by late March. Historically, during a moderate or severe winter, ice in navigable waters requires the implementation of additional safety measures; thus, the development of the Ice Guidelines. Vessel masters should contact their local vessel agent or office for up-to-date information on ice conditions.

### C.11.1 Ice Phases in Cook Inlet

During ice season, as prevailing weather conditions dictate, USCG Sector Anchorage will set an appropriate ice condition of readiness throughout its area of responsibility. Below the conditions are defined:

- 1. Phase I. North of 60° 45' N latitude (East and West Forelands). Historically been activated in Jan/Dec and removed in March/April when ice concentration was approximately 7-8 tenths in Cook Inlet. USCG determines the actual activation by utilizing ice forecasts by the National Weather Service (NWS) Ice Desk and communications with the Pilots and industry representatives.
- 2. Phase II. South 60° 45' N latitude (East and West Forelands). Historically activated when ice coverage reached 7-8 tenths in lower Cook Inlet, especially along the eastern shore near Kenai and Nikiski docks.

### C.11.2 Contact Information for Ice Operations

#### NOAA/ NWS:

Regional Operations Center (ROC): (907) 271-6540, <u>mws.ar.roc@noaa.gov</u> Alaska Sea Ice Program (ASIP): (907) 266-5138, <u>mws.ar.ice@noaa.gov</u>

USCG:

Command Center, Sector Anchorage: (907) 428-4100 Waterways Management Division, Sector Anchorage: <u>Anchorage.Waterways@uscg.mil</u>

SWAPA, Homer: (907) 235-8783

# SECTION D: APPENDIX

# **D.1. GLOSSARY**

| Captain of the Port<br>(COTP)                | The Coast Guard officer designated by the Commandant to command a Captain of the Port Zone as described in Part 3 of Title 33 Code of Federal Regulations.   |
|--|--|
| Captain of the Port<br>(COTP) Zone           | A zone specified in Title 33 Code of Federal Regulations, Part 3 and, for coastal ports, the seaward extension of that zone to the outer boundary of the EEZ.  |
| Cooperative Vessel<br>Traffic Service (CVTS) | The system of vessel traffic management established and jointly operated by the United States and Canada within adjoining waters. In addition, CVTS facilitates traffic movement and anchorages, avoids jurisdictional disputes, and renders assistance in emergencies occurring in adjoining United States and Canadian waters.   |
| District Commander                           | The Coast Guard officer designated by the Commandant of the U.S. Coast<br>Guard to command a Coast Guard District as described in Part 3 of Title 33<br>Code of Federal Regulations.   |
| Exclusive Economic Zone<br>(EEZ)             | The zone contiguous to the territorial seas of the United States, extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial seas is measured.   |
| Marine Transportation<br>System (MTS)        | 38The U.S. Marine Transportation System (MTS) consists of waterways, ports<br>and their inter-modal connections, vessels, vehicles, and system users, as well<br>as federal maritime navigation systems. Specifically, it consists of: 25,000 miles<br>of navigable channels; over 300 ports; 238 locks at 192 locations; Great<br>Lakes; St. Lawrence Seaway; over 3,700 marine terminals; and numerous<br>recreational marinas. Through 1400 designated inter-modal connections, it<br>connects with over 174,000 miles of rail connecting all 48 contiguous States, as<br>well as Canada and Mexico); over 45,000 miles of interstate highway<br>(supported by over 115,000 miles of other roadways); and over 460,000 miles<br>of pipelines.   |
| Preparedness                                 | The range of deliberate, critical tasks and activities necessary to build, sustain,<br>and improve the operational capability to prevent, protect against, respond to,<br>and recover from domestic incidents. Preparedness is a continuous process<br>involving efforts at all levels of government and between government and<br>private-sector and nongovernmental organizations to identify threats, determine<br>vulnerabilities, and identify required resources.  |
| Prevention                                   | Actions taken to avoid an incident or to intervene to stop an incident from<br>occurring. Prevention involves actions taken to protect lives and property. It<br>involves applying intelligence and other information to a range of activities that<br>may include such countermeasures as deterrence operations; heightened<br>inspections; improved surveillance and security operations; investigations to<br>determine the full nature and source of the threat; public health and agricultural<br>surveillance and testing processes; immunizations, isolation, or quarantine; and,<br>as appropriate, specific law enforcement operations aimed at deterring,<br>preempting, interdicting, or disrupting illegal activity and apprehending<br>potential perpetrators and bringing them to justice. |

| Response               | Activities that address the short-term, direct effects of an incident. Response<br>includes immediate actions to save lives, protect property, and meet basic<br>human needs. Response also includes the execution of emergency operations<br>plans and of incident mitigation activities designed to limit the loss of life,<br>personal injury, property damage, and other unfavorable outcomes. As<br>indicated by the situation, response activities include applying intelligence and<br>other information to lessen the effects or consequences of an incident; increased<br>security operations; continuing investigations into the nature and source of the<br>threat; ongoing public health and agricultural surveillance and testing processes;<br>immunizations, isolation, or quarantine; and specific law enforcement<br>operations aimed at preempting, interdicting, or disrupting illegal activity, and<br>apprehending actual perpetrators and bringing them to justice. |
|------------------------|---|
| Sector Commander       | Field level Coast Guard operational command. The senior Coast Guard official is the Sector Commander and, in most cases, this individual will also be the designated COTP.  |
| Stakeholder            | Those individuals or groups who can have an effect on, or be affected by, maritime operations and other events with the coastal marine environment.   |
| Standard of Care (SOC) | Standards of Care are the procedures and practices, beyond regulatory<br>requirements, that experienced and prudent maritime professionals follow to<br>ensure safe, secure, efficient and environmentally responsible maritime<br>operations. Formalized Standards of Care are "good marine practices" that are<br>developed and published to provide a guide for maritime professionals to<br>consider and incorporate into their decision making process. Standards of Care<br>complement the laws and regulations and should they seem to conflict with law<br>or regulation, the law or regulation is always superior.   |
| State                  | Any state of the United States, the District of Columbia, the Commonwealth of<br>Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the<br>Commonwealth of the Northern Mariana Islands, and any possession of the<br>United States. (As defined in section 2(14) of the Homeland Security Act of<br>2002, Public Law 107-296, 116 Stat. 2135, et seq. (2002).) For purposes of this<br>Plan, we mean the State of Washington.   |
| Tribe                  | Any Indian tribe, band, nation, or other organized group or community,<br>including any Alaskan Native Village as defined in or established pursuant to<br>the Alaskan Native Claims Settlement Act (85 Stat. 688) [43 U.S.C.A. and<br>1601 et seq.], that is recognized as eligible for the special programs and services<br>provided by the United States to Indians because of their status as Indians.  |
| Vessel Response Plan   | The oil spill response plan, to which the vessel is subject, as required by Federal and/or State regulations.   |
| Vessel Traffic Service | The service implemented by the United States Coast Guard designed to<br>improve the safety and efficiency of vessel traffic and to protect the<br>environment. The VTS has the capability to interact with marine traffic and<br>respond to traffic situations developing in the VTS area. In the Pacific<br>Northwest, we have a Cooperative Vessel Traffic Service – see description<br>above.  |

# **D.2. ABBREVIATIONS AND ACRONYMS**

| AC      | Area Committee   |
|---------|--|
| ACOE    | (United States) Army Corps of Engineers                              |
| ADEC    | Alaska Department of Environmental Conservation                      |
| ADFG    | Alaska Department of Fish and Game                                   |
| ADNR    | Alaska Department of Natural Resources                               |
| ADV     | Abandoned and Derelict Vessels                                       |
| AIS     | Automatic Identification System                                      |
| AMSC    | Area Maritime Security Committee                                     |
| APIS    | Advance Passenger Information System                                 |
| ATB     | Articulated Tug Barge  |
| ATBA    | Area to be Avoided   |
| ATON    | Aids to Navigation   |
| AWO     | American Waterways Operators   |
| BTM     | Bridge Team Management   |
| CBP     | (United States) Customs and Border Patrol                            |
| CCG     | Canadian Coast Guard   |
| CDC     | Certain Dangerous Cargo  |
| CFR     | Code of Federal Regulations  |
| CIHSC   | Cook Inlet Harbor Safety Committee                                   |
| COLREGS | Int'l Regulations for Avoiding Collisions as Sea (Rules of the Road) |
| СОТР    | Captain of the Port  |
| CVTS    | Cooperative Vessel Traffic Service                                   |
| DWT     | Deadweight Tons  |
| ECDIS   | Electronic Chart Display and Information Systems                     |
| EEZ     | Exclusive Economic Zone  |
| eNOAD   | Electronic Notice of Arrival/Departure System                        |
| ETA     | Estimated Time of Arrival  |
| ETD     | Estimated Time of Departure  |
| GT      | Gross Tons   |
| HSP     | Harbor Safety Plan   |
| ITB     | Integrated Tug Barge   |
| ITU     | International Telecommunications Union                               |
| IMO     | International Maritime Organization                                  |
| LEL     | Lower Explosive Level  |
| LNM     | Local Notice to Mariners   |
| MARAD   | (United States) Maritime Administration                              |
| MARPOL  | International Convention of the Prevention of Pollution from Ships   |
| MDA     | Maritime Domain Awareness  |
| MMSI    | Maritime Mobile Service Identity                                     |
| MTS     | Marine Transportation System   |
| NOA     | Notice of Arrival (i.e., U.S. 96 hour Notice of Arrival)             |

| NOD   | Notice of Departure   |
|-------|---|
| NOAA  | National Oceanic and Atmospheric Administration                       |
| NVMC  | National Vessel Movement Center                                       |
| NVPZ  | Naval Vessel Protection Zone  |
| OPA   | Oil Pollution Act of 1990   |
| OSRO  | Oil Spill Removal Organization  |
| PEL   | Permissible Exposure Level  |
| PIC   | Person in Charge  |
| PPOR  | Potential Places of Refuge  |
| RCP   | Responsible Carrier Program   |
| RRT   | Regional Response Team  |
| SLNM  | Special Local Notice to Mariners                                      |
| SOC   | Standard of Care  |
| STBL  | Ship to be Lightered  |
| SOLAS | Safety of Life at Sea   |
| STCW  | Standards for Training, Certification, and Watchkeeping for Seafarers |
| SWAPA | Southwest Alaska Pilots Association                                   |
| SWL   | Safe Working Load   |
| USC   | United States Code  |
| USCG  | United States Coast Guard   |
| VRP   | Vessel Response Plan  |
| VTS   | Vessel Traffic Service  |
| WX    | Weather   |

### **D.3. USEFUL PHONE NUMBERS**

| 1. | USCG Sector Anchorage Command Center          | 907-428-4100 |
|----|---|--------------|
| 2. | USCG Sector Anchorage Inspections Division    | 907-428-4163 |
| 3. | USCG Sector Anchorage Waterways Management    | 907-428-4189 |
| 4. | USCG Marine Safety Detachment Homer           | 907-235-3292 |
| 5. | Marine Exchange of Alaska                     | 907-463-2607 |
| 6. | Southwest Alaska Pilots Association           | 907-235-8783 |
| 7. | NOAA Alaska Region Navigation Manager         | 907-271-3327 |
| 8. | NOAA Alaska Sea Ice Program                   | 907-266-5138 |
| 9. | Marine Desk – Anchorage International Airport | 907-271-6313 |
|    |   |              |

# **D.3.1. Oil/Hazardous Material Spill Reporting**

(This is not an all-inclusive list. Operators should follow their Facility/Vessel Response plan as per applicable laws and regulations):

| 1. | National Response Center                        | 800-424-8802 |
|----|---|--------------|
| 2. | USCG Sector Anchorage Command Center            | 907-428-4100 |
| 3. | Alaska Department of Environmental Conservation | 907-269-3063 |
|    | Division of Spill Prevention and Response       | 800-478-9300 |

# D.4. TUG/BARGE PRE ARRIVAL CHECKLIST

| NAVIGATION/STEERING  |  |
|--|--|
| 1. Steering unit(s) operation and fluid level checked  |  |
| 2. For all wheelhouse helm stations, each steering motor energized and rudder operated hard over to hard over. |  |
| 3. For remote steering stations, air switch activated and rudder operated hard over to hard over.              |  |
| 4. Steering alarms, as fitted, tested.   |  |
| 5. Rudder angle indicators at all stations verified operational.   |  |
| 6. Visual inspection of terminal gear, steering components and linkages current.                               |  |
| 7. Off-line generator started and test run. Alarms, as fitted, operational.                                    |  |
| 8. Wheel house VHF/ FM marine transceivers tested.   |  |
| 9. Portable VHF radios tested.   |  |
| 10. Internal communication system operational.   |  |
| 11. Radars operational and energized.  |  |
| 12. Navigation lights checked (tug and barge).   |  |
| 13. Depth sounder checked  |  |
| 14. GPS checked and operational  |  |
| 15. AIS checked and operational  |  |
| 16. ECS checked with latest updates (if equipped)  |  |
| 17. Charts and nav pubs for intended transit area(s)   |  |
| 18. Current Local Notice to Mariners   |  |
| PROPULSION   |  |
| 1. Each main propulsion system tested for throttle response/control in ahead and astern.                       |  |
| 2. Propulsion system alarms, as fitted, operational.   |  |
| 3. Control system alarms, as fitted, operational.  |  |
| Deck Machinery   |  |

| 1. Check operation and control of tow winch                               |  |  |  |
|---|--|--|--|
| 2. Check operation and control of bow/anchor winch (if equipped)          |  |  |  |
| 3. Check operation and control of deck capstan(s) (if equipped)           |  |  |  |
| Tow Gear  |  |  |  |
| 1. Tow wire terminus and "D" inspected                                    |  |  |  |
| 2. Tow shackle connections and safety keepers inspected                   |  |  |  |
| Safety Gear/Equipment   |  |  |  |
| 1. Life raft in date  |  |  |  |
| 2. Sufficient immersion suits to accommodate crew on board                |  |  |  |
| 3. Sufficient approved work vests to accommodate crew on board            |  |  |  |
| 4. Sufficient cold weather gear for accommodate crew on board             |  |  |  |
| 5. Sufficient fire-fighting equipment on board with in date inspection(s) |  |  |  |
| Routing   |  |  |  |
| 1. Local knowledge/recency in area  |  |  |  |
| 2. Tow wire catenary adjusted for intended transit route                  |  |  |  |
| 3. Tide/current tables reviewed   |  |  |  |
| 4. Safe anchorages identified   |  |  |  |
| 5. Local weather forecasts reviewed                                       |  |  |  |

# D.5. OPERATING GUIDELINES FOR ICE CONDITIONS IN COOK INLET

# **UPPER COOK INLET PHASE I**

(above 60 degrees 45 minutes North Latitude)

| Winter Of | Effective | Removed  |
|-----------|-----------|----------|
| 1995/1996 | 12/07/95  | 03/26/96 |
| 1996/1997 | 11/25/96  | 04/01/97 |
| 1997/1998 | 12/16/97  | 03/23/98 |
| 1998/1999 | 11/30/98  | 04/09/99 |
| 1999/2000 | 12/06/99  | 03/13/00 |
| 2000/2001 | 12/18/00  | 03/30/01 |
| 2001/2002 | 11/29/01  | 04/09/02 |
| 2002/2003 | 12/30/02  | 02/10/03 |
| 2003/2004 | 11/26/03  | 04/07/04 |
| 2004/2005 | 12/07/04  | 03/22/05 |
| 2005/2006 | 11/28/05  | 04/17/06 |
| 2006/2007 | 11/15/06  | 04/19/07 |
| 2007/2008 | 12/04/07  | 04/01/08 |
| 2008/2009 | 01/06/09  | 04/10/09 |
| 2009/2010 | 01/27/10  | 04/15/10 |
| 2010/2011 | 12/07/10  | 04/13/11 |
| 2011/2012 | 11/23/11  | 04/12/12 |
| 2012/2013 | 11/21/12  | 04/18/13 |
| 2013/2014 | 12/04/13  | 04/02/14 |
| 2014/2015 | 12/25/14  | 04/01/15 |
| 2015/2016 | 12/16/15  | 03/04/16 |
| 2016/2017 | 12/01/16  | 4/12/17  |
| 2017/2018 | TBD       | TBD      |

# LOWER COOK INLET PHASE II (below 60 degrees 45 minutes North Latitude)

| Winter of | Effective   | Removed     |
|-----------|-------------|-------------|
| 1995/1996 | 01/25/95    | 03/26/96    |
| 1996/1997 | 12/31/96    | 04/01/97    |
| 1997/1998 | 01/05/98    | 03/23/98    |
| 1998/1999 | 01/08/99    | 03/23/99    |
| 1999/2000 | 01/07/00    | 03/13/00    |
| 2000/2001 | No Phase II | No Phase II |
| 2001/2002 | 12/17/01    | 04/09/02    |
| 2002/2003 | No Phase II | No Phase II |
| 2003/2004 | 12/29/03    | 03/17/04    |
| 2004/2005 | 01/18/05    | 03/11/05    |
| 2005/2006 | 01/26/06    | 04/04/06    |
| 2006/2007 | 11/25/06    | 04/10/07    |
| 2007/2008 | 02/04/08    | 04/01/08    |
| 2008/2009 | 01/02/09    | 03/31/09    |
| 2009/2010 | No Phase II | No Phase II |
| 2010/2011 | 01/20/11    | 03/28/11    |
| 2011/2012 | 01/03/12    | 03/29/12    |
| 2012/2013 | 12/20/12    | 02/20/13    |
| 2013/2014 | No Phase II | No Phase II |
| 2014/2015 | No Phase II | No Phase II |
| 2015/2016 | No Phase II | No Phase II |
| 2016/2017 | 01/09/17    | 04/07/17    |
| 2017/2018 | TBD         | TBD         |

U.S. Department of Homeland Security

United States Coast Guard



Commander United States Coast Guard Sector Anchorage PO Box 5800 JBER, AK 99505 Staff Symbol: s Phone: 907-428-4144 Fax: 907-428-4138

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#### CAPTAIN OF THE PORT, WESTERN ALASKA NAVIGATION SAFETY ADVISORY

#### **OPERATING GUIDELINES FOR ICE CONDITIONS IN COOK INLET**

#### I. OVERVIEW

#### A. INTRODUCTION

1. The Captain of the Port (COTP), Western Alaska, through consultation with the Southwest Alaska Pilots Association (SWAPA) and Cook Inlet maritime operators, developed these operating guidelines (hereafter, *Guidelines*) for vessels operating in Cook Inlet during winter ice conditions. They represent a culmination of best practices for mitigating risk to life, property, and the environment.

2. These *Guidelines* supersede all previous Operating Guidelines/Procedures for Ice Conditions in Cook Inlet. We invite your feedback and proposed revisions. As best practices evolve and lessons are learned, we anticipate and welcome changes. If you have any questions concerning these *Guidelines*, please contact the USCG Sector Anchorage Command Center at (907) 428-4100.

- 3. These *Guidelines* include the following changes:
  - a. Removed reference to SWAPA tidebook in paragraph II.A.10. Clarified that forecast currents should be obtained from NOAA;
  - b. Clarified that all vessels should moor in such a fashion to mitigate "worst case" ice conditions expected in II.A.12;
  - c. Removed the word "tug" from II.C.2. Clarified the use of the term "ice scout";
  - d. Combined previous language for the Tesoro and ConocoPhillips dock into one section, IV.A.1;
  - e. Inserted new section IV.A.2 for the Christy Lee Platform at Drift River;
  - f. Clarified that any changes or repairs to the vessel or its systems before or after an ice exam must be reported to the Coast Guard Officer in Charge, Marine Inspection, in the Pre-arrival Self Examination Checklist included as Enclosure (1).

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#### **B. IMPLEMENTATION**

1. As ice analysis, forecasts, and collective risk assessments dictate, the COTP will issue Navigation Safety Advisories to activate additional measures for ice conditions in two phases: Phase I for upper Cook Inlet and Phase II for lower Cook Inlet. The two-phased approach was established to facilitate more timely and appropriate risk mitigation strategies for ice conditions observed north and south of 60° 45' N latitude (East and West Forelands). These phases will be activated and deactivated as circumstances or industry input warrant.

2. Activation of Phase I and II measures for ice conditions is based on a number of factors, to include: observed and forecast severe sub-freezing temperatures, aerial observations, information, and analysis provided by NOAA, SWAPA, and Cook Inlet maritime operators.

3. If ice conditions preclude the safe operation of vessels at berths in Nikiski, Drift River, Port Mackenzie, or the Port of Anchorage, the COTP may terminate cargo operations or close the terminal or port until conditions improve under the authority of 33 CFR 160.111. In addition, if the condition of the vessel changes in a manner that may result in a hazardous condition, or when in doubt, contact the Coast Guard.

4. All facility operators will follow the ice operations sections of their Coast Guard approved Operations Manuals, as appropriate.

#### **II. STANDING GUIDELINES DURING ICE CONDITIONS**

#### A. ALL VESSELS GREATER THAN 300GT

1. This subsection of the *Guidelines* stays in effect throughout the ice season and applies to all vessels greater than 300 gross tons transiting Cook Inlet during ice conditions.

2. The Master is ultimately responsible for the safe operation of the vessel at all times. Adherence to appropriate risk mitigation in accordance with these *Guidelines* demonstrates forehandedness on the part of the Master and is in keeping with prudent seamanship. However, it is the Master's responsibility to take all necessary steps to effectively mitigate risk in all circumstances.

3. The Master should ensure proper operation of all vessel machinery and systems in ice conditions and / or ambient air temperatures to -40 degrees Fahrenheit / -40 degrees Celsius. This includes but is not limited to emergency fire pumps, generators, and mooring winches.

4. The Master should maintain adequate draft to keep the vessel's sea suction and propeller well below the ice to prevent ice from sliding under the vessel. If a non-tank vessel must deviate from normal ballast procedures to meet this requirement (i.e., place

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water ballast in a cargo hold), the Master should obtain approval from the vessel's classification society prior to transiting through Cook Inlet. In addition, the Master should confirm the watertight integrity of the vessel prior to transit.

5. The Master should ensure the vessel crew is equipped with adequate personal protection suitable for cold weather during deck operations.

6. When transiting Cook Inlet, vessels must not force ice at any time. For these purposes, "forcing ice" is defined as making way through ice that is substantial enough to significantly slow the speed of the vessel, or when the vessel slows to 50% or less of the speed being made before entering the ice. If the Master, Pilot, or both believe the vessel is forcing ice, the Master should abort the transit and navigate to safer waters until more favorable conditions are present (excluding Offshore Supply Vessels and Barge Operations).

7. While these *Guidelines* are in effect, self-propelled vessels transiting Cook Inlet are subject to an ice safety examination upon arrival at the pilot station in Kachemak Bay. Vessel operators or their agents must contact the COTP at Sector.Anchorage@uscg.mil or by fax: (907) 428-4114 at least 24 hours in advance of the vessel's arrival to the pilot station to determine if the vessel must undergo examination. The examination is in addition to other Coast Guard safety examinations applicable to the vessel. If an ice safety examination is required, the Master of the vessel must complete and send the *Prearrival Self Examination Checklist* included as Enclosure (1) to: Sector.Anchorage@uscg.mil or (907) 428-4114 (fax) at least 24 hours in advance of the vessel's arrival to the pilot station. Coast Guard personnel will conduct the examination using the *Ice Guidelines Exam Form* included as Enclosure (2).

8. Vessels with Internal Combustion Engines:

a. If fitted with a heat exchanger, the raw water must be kept at a sufficient temperature to prevent the accumulation of ice or slush ice within the system. This may be achieved by delivering a heated medium to both the primary and secondary sea chests. The medium should be continuously supplied to both sea chests from the time the vessel passes Anchor Point inbound until the time the vessel passes Anchor Point outbound. Only lines or hoses designed for their intended service will be in use.

b. Starting and control air tanks should remain peaked.

c. All vessels propelled by gas turbines should maintain the auxiliary gas turbine ready for immediate use and engagement in the event of main gas turbine failure.

9. All vessels arriving in Cook Inlet destined for a port with an active ice condition must file a voyage plan with the COTP by email: Sector.Anchorage@uscg.mil or by fax: (907) 428-4114, no less than 24 hours prior to arrival at or abeam the Kachemak Bay pilot

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station. Typically, the voyage plan will include an assessment of ice conditions based on National Weather Service reports and observations by SWAPA Pilots and other operators. Voyage plans must advise the COTP of intentions to contract with a tug to lead the vessel through ice when needed. A *Cook Inlet Voyage Plan* template is included as Enclosure (3).

10. Vessel operators should make environmental considerations including: impacts of the tide and currents on ice pack and water depths, expected weather during transit, and visibility assessments. To obtain forecast currents corrected for Nikiski, consult the NOAA website at: <u>https://tidesandcurrents.noaa.gov/noaacurrents/Stations?g=693</u>

11. If the weather forecast is cooling below 20 degrees Fahrenheit / -6 degrees Celsius, or the ice report is marginal, vessel operators should conduct a risk reduction evaluation prior to transiting Cook Inlet.

12. All vessels (including barges) should moor in such a fashion to mitigate "worst case" ice conditions expected.

13. If ice builds up between a moored vessel (including barges) and the pier that may threaten the integrity of the mooring, the vessel should be pulled away from the berth prior to maximum current to flush away accumulated ice.

14. Vessel operators should ensure their crewmembers are familiar with their communications procedures, backup and emergency communications are established, and radio channels and phone numbers are agreed upon prior to transiting Cook Inlet.

#### **B. OFFSHORE SUPPLY VESSEL OPERATIONS**

1. This subsection of the *Guidelines* stays in effect throughout the ice season and applies to all offshore supply vessels transiting Cook Inlet during ice conditions.

2. Vessels should maintain a full 24-hour crew compliment as specified in the Certificate of Inspection, regardless of voyage distance or vessel automation.

3. Vessel's hull should be of sufficient strength to force ice without impacting its seaworthiness.

#### C. TUG AND BARGE OPERATIONS

1. This subsection of the *Guidelines* stays in effect throughout the ice season and applies to all tug and barges transiting Cook Inlet during ice conditions.

2. Where ice coverage is seven tenths, close pack coverage or greater as published by the NOAA Ice Desk (links below), tugs attending barges should use an ice scout prior to commencing their transit.

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National Weather Service Alaska Sea Ice Program: http://www.weather.gov/afc/ice Cook Inlet Concentration: http://www.weather.gov/images/afc/ice/CTCookInlet.jpg Cook Inlet Stage (Thickness): http://www.weather.gov/images/afc/ice/SACookInlet.jpg

3. Tugs attending barges commonly maintain a notable reduction in speed while transiting through ice. Therefore, a barge transit into or out of a port of call in Cook Inlet above the East Forelands should occur during one tide cycle.

4. One tide cycle is defined as one flood or ebb tide into or out of an intended port of call above the East Forelands.

5. The lead vessel should immediately notify following vessels if the lead vessel is unable to proceed without "forcing ice."

6. Tug and barge operators should maintain a safe distance of separation between vessels based on current and predicted ice conditions.

7. Tug and barge operators should consider vessel traffic in the operating area and exercise safety measures such as: operating at a safe speed and establishing a collision avoidance steering maneuver agreement between operators.

8. Tug and barge operators are recommended to ensure their crewmembers agree upon the initial route planning and discuss potential deviations based on changing ice conditions. Operators are recommended to use the Pre-Arrival Checklist for Tug and Barge Operators included as Enclosure (4) in addition to pre-established safety procedures in preparation for operation during ice conditions in Cook Inlet.

#### **III.PHASE I - UPPER COOK INLET**

**North** of 60° 45' N latitude (East -West Forelands)

#### WHILE MOORED AT FACILITIES IN UPPER COOK INLET:

#### A. SELF-PROPELLED VESSEL OPERATIONS

1. Vessels should maintain "underway" watches in both engineering spaces and on the bridge when ice conditions threaten a vessel's mooring arrangement.

2. While these guidelines are in effect, steam (or other heated medium, **not** including air) should be continuously delivered to both, the primary and secondary sea chests.

3. Engines, generators, propulsion systems, and winches should be in a status to ensure the most expeditious means of mitigating ice conditions by relieving strain on mooring lines, getting the vessel underway, or both as appropriate. A sufficient number of additional mooring lines should also be immediately available.

#### **B. TUG AND BARGE OPERATIONS**

1. Tugs attending barges should maintain an "underway" watch while alongside a dock.

2. Tugs should keep main engines running and ready for immediate operation, to include testing generators, pumps, and winches for operation, in order to ensure prompt action can be taken to mitigate hazardous ice conditions, relieve strain on mooring lines, or get underway.

3. A sufficient number of additional mooring lines should be immediately available.

4. Ensure assist tugs are available for transit and confirm that they have no schedule conflicts.

#### **IV. PHASE II - LOWER COOK INLET**

**South** of 60° 45' N latitude (East - West Forelands)

#### A. SELF-PROPELLED VESSEL OPERATIONS

1. When Phase II *Guidelines* are in effect and the flood current forecast is **4 knots or greater** and the vessel is encountering ice conditions **alongside the Tesoro and ConocoPhillips dock**, the following actions should be taken:

- a. Discontinue all transfer operations;
- b. Make transfer hoses ready for immediate disconnect;

c. Maintain a continuous watch (to include a Pilot) to ensure the most expeditious means of mitigating ice conditions by relieving strain on mooring lines, getting the vessel underway, or both as appropriate. Place engines and propulsion systems in a status to ensure the most expeditious means of mitigating ice conditions by relieving strain on mooring lines, getting the vessel underway, or both as appropriate; and,

d. Position a designated vessel up current of the moored vessel to serve as an ice scout. The ice scout should only work under the direction of the moored vessel's navigational watch. The ice scout should be positioned to ensure observed ice conditions are relayed to the moored vessel in a timely manner for effective risk mitigation efforts.

- 2. When Phase II *Guidelines* are in effect and the vessel is encountering ice conditions **alongside the Christy Lee Platform at Drift River**, the following actions should be taken in advance of forecast significant flood or ebb currents:
  - a. Discontinue all transfer operations;

b. Make transfer arms ready for immediate disconnect;

c. Maintain a continuous watch (to include a Pilot) to ensure the most expeditious means of mitigating ice conditions by relieving strain on mooring lines, getting the vessel underway, or both as appropriate. Place engines and propulsion systems in a status to ensure the most expeditious means of mitigating ice conditions by relieving strain on mooring lines, getting the vessel underway, or both as appropriate.

3. The Master, Pilot, or Person-in-Charge should discontinue transfer operations, disconnect hoses, and get the vessel underway any time circumstances warrant.

#### **B. NIKISKI TUG/BARGE OPERATING GUIDELINES**

1. When Phase II guidelines are in effect, in addition to filing a voyage plan with the COTP the following actions should be taken:

a. An "assist" tug should assist the attending tug and barge to the facility;

b. When there is no ice at the dock and the barge has successfully moored, the assist tug may act as an ice scout under the direction of the moored tug's navigational watch. The ice scout should be positioned in the best location so that current ice conditions can be relayed to the attending tug in a timely manner, allowing tow response to expedite prudent risk mitigation;

c. The attending tug should maintain an "underway" watch on the bridge while alongside the dock, keep main engines running and ready for immediate operation, and keep a sufficient number of additional mooring lines immediately available for use in an emergency;

d. When a vessel is encountering ice conditions while alongside the dock, the assist tug should reposition alongside the moored tow in a timely manner;

e. When the flood current forecast is **2 knots or greater** and the tow is encountering ice conditions whether underway or moored, both the attending and assist tug should keep main engines running and ready for immediate operation; and,

f. When the current forecast is **4 knots or greater** and the tug and barge is encountering ice conditions, all transfer operations should be discontinued and transfer hoses made ready for immediate disconnect.

2. The facility dock Person-in-Charge, Towing Vessel Operator, Tug Captain, or Barge Tankerman may determine it prudent to suspend transfer operations and disconnect hoses during maximum flood currents, since the ice floe is heavier on the flood tide at the Nikiski docks.

16710 November 13, 2017

#### C. OFFSHORE SUPPLY VESSEL OPERATIONS

1. An "underway" watch should be maintained on the bridge when ice conditions threaten a vessel's anchoring or mooring arrangement.

SCMoley S, CHOT

S. C. MACKENZIE Captain, U.S. Coast Guard Captain of the Port, Western Alaska

4 Enclosures

|  | Pre-arrival | Self-Examination | Checklist |
|--|-------------|------------------|-----------|
|--|-------------|------------------|-----------|

|   |                                  | Official             |                                       |    |
|---|----------------------------------|----------------------|---------------------------------------|----|
| Vessel Name   |                                  | Number               |                                       |    |
|   |                                  | Arrival Date /       |                                       |    |
| Arrival Port / Facility                                     |                                  | Time                 |                                       |    |
| Vessel Draft  | Forward                          | Aft                  |                                       |    |
|   |                                  |                      | VEC                                   | NO |
|   |                                  |                      | YES                                   | NO |
| Has the vessel received and<br>Guidelines for Ice Condition | 17                               | 1 0                  |                                       |    |
| Please contact SectorA                                      | nchorageArrivals@uscg.mil fe     | or a copy            |                                       |    |
| Do deck personnel have a                                    |                                  |                      |                                       |    |
| Paragraph II.A.5. (Pg                                       | 1 1                              | U                    | LI                                    |    |
| Does the bridge or wheelh                                   |                                  | neating?             |                                       |    |
| e   | uld interfere with crew's perfor | 0                    | II                                    |    |
| Do living quarters have ad                                  |                                  |                      |                                       |    |
| 01  | uld interfere with crew's perfor | mance of duties      | II                                    |    |
| Has steering gear test requ                                 |                                  |                      |                                       |    |
| conducted with satisfactor                                  |                                  |                      | II                                    |    |
| Does the vessel have stean                                  | ·                                | ystem running to all |                                       |    |
| sea chests?   |                                  |                      |                                       |    |
| Paragraph II.A.8. (Pg                                       | g 4)                             |                      | · · · · · · · · · · · · · · · · · · · |    |
| Are heat exchangers opera                                   | ting on all secured en           | igines?              |                                       |    |
| Paragraph II.A.8. (Pg                                       | g 3)                             |                      |                                       |    |
| Is emergency generator fue                                  | el tank full?                    |                      |                                       |    |
|   |                                  |                      | · · · · · ·                           |    |
| Is emergency generator set                                  | to begin operation a             | utomatically?        |                                       |    |
| TT  | .1                               |                      |                                       |    |
| Has an operational test of CFR 164.25a.(1) through (        | · · ·                            |                      |                                       |    |
| results?  | 5) been conducted w              | illi salistactory    |                                       |    |
|   |                                  |                      |                                       |    |
| Has an operational test of                                  | the primary and eme              | reency fire numps    |                                       |    |
| been conducted with satisf                                  | 1 ,                              | igeney me pumpo      | LI                                    |    |
| Paragraph II.A.3. (Pg                                       |                                  |                      |                                       |    |
| Has an operational test of                                  | the ballast water pur            | p been conducted     |                                       |    |
| with satisfactory results?<br>Paragraph II.A.3, II.         | $A \downarrow (Pa 2)$            |                      |                                       |    |
|   |                                  | 1:6-1                |                                       |    |
| Has a visual examination b<br>releasing gear and emerger    |                                  |                      |                                       |    |

Is the crew familiar with the vessel's communications procedures, vessel's planned route and collision avoidance procedures?

Paragraph II.A.14. (Pg 4) Explain any 'NO' response:

I have read and understood the document *Operating Guidelines for Ice Conditions in Cook Inlet* and attest to the veracity of this checklist report.

Master's Printed Name:

Master's Signature:

Any changes to the vessel or its systems before or after an ice exam must be reported to the Coast Guard Officer in Charge, Marine Inspection.

Please send completed forms at least 24 hours prior to arrival in Cook Inlet to: Sector.Anchorage@uscg.mil or 907.428.4114 (fax)

#### **Ice Guidelines Exam Form**

| Vessel Name:  | Date:                                |
|---|--------------------------------------|
| Ice Guidelines in effect for: Upper Cook Inlet  | Entire Cook Inlet                    |
| Extreme Ice Conditions Addendum in effect?  |                                      |
| Vessel Destination in Cook Inlet:   |                                      |
| Draft Readings: Forward Aft   |                                      |
| CG Inspectors/examiners:  | /                                    |
| All deck personnel must have adequate winter protective   | clothing.                            |
| Steering gear test witnessed.   |                                      |
| Wheelhouse and living quarters heated.  |                                      |
| Operational test conducted of fire, ballast and emergency   | fire pump (do not press deck lines). |
| Operational test conducted of both anchor windlasses and moored to a pier).   | all deck mooring winches (not while  |
| Steam run to all sea chests or a re-circulation system. If s<br>for steam service. Operationally test all steam lines to en<br>steam is delivered all the way into the sea chest. |                                      |
| Ensure all secured engines have heat exchangers on. All<br>Turbines shall maintain the auxiliary gas turbine ready for<br>of main gas turbine failure.                            |                                      |
| Ensure emergency generator fuel tank is topped off, and g<br>Operationally test by starting in manual mode.   | generator set in auto mode.          |
| Discuss with vessel personnel the requirement to maintain<br>prescribed "Ice Guidelines", including while at the dock a<br>voyages while the "Ice Guidelines" are in effect.      |                                      |
| Conduct visual examination of releasing gear for lifeboat<br>ice accumulation and discuss with vessel personnel the in<br>this equipment in icy weather.                          |                                      |
| Is the crew familiar with the vessel's communications pro<br>and collision avoidance procedures?  | ocedures, vessel's planned route     |

| Cook  | Inlet | Voyage | Plan |
|-------|-------|--------|------|
| 00011 |       | 10,000 |      |

| Vessel Information               |                                       |
|----------------------------------|---------------------------------------|
| Name                             |                                       |
| Official Number                  |                                       |
| Cargo                            |                                       |
| _                                |                                       |
| Voyage Information               |                                       |
| Notice of Arrival Submitted in a | accordance with 33 CFR 160 Subpart C? |
| Destination                      |                                       |
| ETA                              |                                       |
| ETD                              |                                       |
| Anticipated Weather / Ice Cond   | litions                               |
|                                  |                                       |
|                                  |                                       |
| Planned use of assist tugs       |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
| Contact Information              |                                       |
| Ship (Phone/E-mail/VHF)          |                                       |
|                                  |                                       |
| Agent                            |                                       |
| Owner / Operator                 |                                       |
| Did you fill out required Ice Gu | idelines self examination sheet       |
| (Found on Homeport)              |                                       |
| Fax with Voyage Plan             |                                       |
|                                  |                                       |
| Additional Information           |                                       |
| 5                                |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
|                                  |                                       |
| Voyage Plan Submitted by         |                                       |
| , o                              |                                       |

#### **Pre-Arrival Checklist for Tug and Barge Operators**

#### **Checklist Item**

#### **Master's Initials**

| Pre docking  |  |  |  |
|--|--|--|--|
| 1. Review Port Information Book prior to arrival   |  |  |  |
| 2. Check most current weather forecast 1 hour prior to docking maneuvers                                       |  |  |  |
| 3. Check tide/current tables and advise tankerman of slack tide periods and range of tide,                     |  |  |  |
| which must be noted in barge load plans  |  |  |  |
| 4. Determine maximum allowable current velocity during docking/undocking maneuvers                             |  |  |  |
| 5. Check operation of mooring winches  |  |  |  |
| 6. Check mooring lines/wires (compliance with facility's mooring requirements)                                 |  |  |  |
| 7. Discuss mooring plan with crew  |  |  |  |
| 8. Review load plan with tankerman   |  |  |  |
| 9. Ensure tug mooring lines (double head and spring lines if moored on the hip)                                |  |  |  |
| 10. Ensure second generator on standby   |  |  |  |
| 11. Ensure backup steering pump online   |  |  |  |
| 12. Determine radio communications with dock and assisting tugs  |  |  |  |
| 13. Ensure all crew required to assist with docking/undocking maneuvers  |  |  |  |
| 14. Determine use of an assist tug at Master's discretion  |  |  |  |
| 15. Determine mooring arrangement: north/south facing orientation  |  |  |  |
| While Moored at dock   |  |  |  |
| 1. Maintain wheelhouse watch at all times when moored  |  |  |  |
| 2. Check weather update 1 hour prior to all water slack  |  |  |  |
| 3. Notify dock control pending weather concerns  |  |  |  |
| 4. Monitor mooring lines/wires (check with dock control for tension indicators)                                |  |  |  |
| 5. Determine when to bring barge hydraulics on line. Example <sup>1</sup> / <sub>2</sub> hour before low slack |  |  |  |
| 6. Determine/manage crew leave while moored at dock  |  |  |  |
| 7. Determine status of tug main engines, steering and navigation equipment before tide                         |  |  |  |
| changes  |  |  |  |
| Towed Barges - Parameters  |  |  |  |
| 1. Determine when head and spring lines should be doubled when operating in and around                         |  |  |  |
| facility   |  |  |  |
| 2. Consider loading barge as uniformly/flat as possible (especially one hour before low                        |  |  |  |
| slack)   |  |  |  |
| 3. Consider maneuvering barge to get tug a lee after departure to minimize slamming                            |  |  |  |
| damage   |  |  |  |

| Checklist Item Mast   | ter's Initials |
|---|----------------|
| Articulated Tug Barges (ATB) - Parameters   |                |
| 1. Determine when ATB's must be all fast at berth. Example: at least one hour prior to high   |                |
| water slack   |                |
| 2. Determine when ATB's mooring at the berth will moor port/starboard side to, bow facing south/north   |                |
| 3. Determine when tug Master will brief the assist tug regarding weather parameters for emergency departure, connection location(s) for tow hawser, if needed and departure procedures    |                |
| 4. Determine when during all periods of flood tides, tug and barge must be hard coupled   |                |
| 5. Determine when tug will commence coupling maneuver. Example: at least ½ hour prior<br>to low water slack, allowing sufficient time to complete coupling prior to the change of<br>tide |                |
| 6. Determine when during coupling maneuvers barge transfer operations are to be shut down and header valve(s) closed  |                |
| 7. Determine when crew will use ballast and loading trim to minimize the number of couple/de-couple maneuvers   |                |
| 8. Determine when tug will have main engines and navigational equipment online and in state of readiness for emergency departure  |                |
| Emergency Departure Guidelines  |                |
| 1. Advise Dock Control of intent to depart  |                |
| 2. Advise assist tug of intent to depart and discuss departure plan   |                |
| 3. All vessel crew called out to assist with departure  |                |
| 4. Secure transfer operations   |                |
| 5. Secure barge valves  |                |
| 6. Barge positioned to squarely spring off dock fender panels (do not allow barge to drift inside face of fender panels)  |                |
| 7. Notify company of emergency departure  |                |