



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

DATE: Wednesday, January 23, 2019
TIME: 11:00 a.m.
LOCATION: State Capitol, Room 225

**RELATING TO PROPER EMERGENCY PROTOCOL AND
PROCEDURES FOR OUR HARBORS AND HARBOR USERS SHOULD
POTENTIAL DISASTERS THREATEN THE STATE**

SENATE COMMITTEE ON TRANSPORTATION

The purpose of the Informational Meeting is to provide education and awareness to the committee and general public of the proper emergency protocol and procedures for our harbors and harbor users should potential disasters threaten the State.

HAWAII'S UNIQUE LOCATION

Hawaii's isolated island geography underscores the significance of ocean cargo transport as the lifeline and only viable means to serve and support every facet of the local economy, including tourism, construction, national defense, agriculture, and all other industries. An estimated 80% of all goods consumed in Hawaii are imported, and 98.6% of the imported goods arrive through the commercial harbor system. Hawaii's residents heavily depend on its commercial harbor system and a disruption of ocean transport services will severely impair the state economy.

STATUTORY CHARGE AND DOT-MISSION

The Department of Transportation, Harbors Division is responsible for the "care and control of the commercial harbors and roadstead" for 9 operating commercial ports and the Hana Pier.

In this matter, we will limit our discussions to the commercial ports including Port Allen and Nawiliwili Harbors located on Kauai; Kaunalapau, Kaunakakai, and Kahului Harbors, located on Maui; Kalaeloa Barbers Point and Honolulu Harbor, located on Oahu, Kawaihae and Hilo Harbor, located on Hawaii.

The Department of Transportation does not manage or oversee the small boat harbors of the Department of Land and Natural Resources.

Our mission is to effectively improve and manage a commercial harbors system that facilitates safe and efficient operations of commercial cargo, passenger, fishing, and other commercial

maritime-related services and support activities within the State of Hawai'i and which serves to sustain and enhance the State's economic prosperity and quality of life.

WHAT ARE THE POTENTIAL DISASTERS

The Harbors Division, like the Airports Division, prepares for natural and man-made disasters. For the purposes of the informational meeting, the Harbors Division will share what is its proper emergency protocol and procedures for the DOT harbors and harbor users should potential disasters threaten.

1. **TSUNAMI.** The University of Hawai'i shared a video of the 2012 Kamaishi earthquake occurred near the city of Kamaishi, Japan, on December 7. The magnitude 7.3 shock generated a small tsunami, with waves up to 1 m high, that hit Ishinomaki in Miyagi Prefecture. It occurred at a depth of 36 km within the Pacific Plate.

The video is of damage to the pier caused by a vessel during the event.

EMERGENCY PREPARATION AND PROTOCOLS

The emergency protocols for tsunami's given time, is to evacuate the harbors.

The Coast Guard has created safety zones within the commercial harbors of the main Hawaiian Islands that will require evacuation if a tsunami warning is issued.

The commercial harbors included are: Hilo Harbor, Barbers Point (Kalaheo) Harbor, Hana Harbor, Honolulu Harbor, Kahului Harbor, Kaunapali Harbor, Kaunakakai Harbor, Kawaihae Harbor and Nawiliwili Harbor.



Coast Guard Cutters Kittiwake and Ahi, both 87-foot Patrol boats homeported in Honolulu, maintain security and safety outside of Honolulu Harbor, March 11, 2011. U.S. Coast Guard photo by Chief Petty Officer Kurt Fredrickson

The purpose of 33 CFR 165.14-1414 - Safety Zones; Hawaiian Islands Commercial Harbors; HI is to evacuate the commercial harbors quickly and efficiently in the event that a tsunami warning is issued. Once a tsunami warning is issued, the Captain of the Port will order the evacuation of the commercial harbors that could be affected.

Evacuating the commercial harbors before the arrival of a tsunami is a key component to reopening the commercial harbors after the threat has passed so that normal operations

can resume. The rule is intended to allow the commercial harbors to return to everyday business quicker following a tsunami or tsunami threat.”

2. HURRICANES.

Pursuant to the authority of the federal government, 33 USC §1221. The Congress found and assigned to its agencies:

- (a) that navigation and vessel safety, protection of the marine environment, and safety and security of United States ports and waterways are matters of major national importance;
- b) that increased vessel traffic in the Nation's ports and waterways creates substantial hazard to life, property, and the marine environment;
- (c) that increased supervision of vessel and port operations is necessary in order to-
 - (1) reduce the possibility of vessel or cargo loss, or damage to life, property, or the marine environment;
 - (2) prevent damage to structures in, on, or immediately adjacent to the navigable waters of the United States or the resources within such waters;
 - (3) insure that vessels operating in the navigable waters of the United States shall comply with all applicable standards and requirements for vessel construction, equipment, manning, and operational procedures; and
 - (4) insure that the handling of dangerous articles and substances on the structures in, on, or immediately adjacent to the navigable waters of the United States is conducted in accordance with established standards and requirements; and
- (d) that advance planning is critical in determining proper and adequate protective measures for the Nation's ports and waterways and the marine environment, with continuing consultation with other Federal agencies, State representatives, affected users, and the general public, in the development and implementation of such measures.

EMERGENCY PREPARATION AND PROTOCOLS

The federal statutes outlines that the US Coast Guard is the lead to implement the above authorities. The Department of Transportation, Harbors Division provides support in meeting the federal mission; and, between the parties adopted the following proper emergency protocol and procedures for our harbors and harbor users should potential disasters threaten the State and the increased federal supervision of vessel and port operations is necessary in order to-(1) reduce the possibility of vessel or cargo loss, or damage to life, property, or the marine environment;

- OBJECTIVES:
 - a. Expedite the restoration and reopening of domestic ports and waterways following an emergency or disaster.
 - b. Assure timely and effective action to provide safe navigation to the maritime community.
 - c. Ensure effective communication and coordination between State and Federal agencies.
 - d. Identify capabilities, roles and responsibilities at an individual level for efficient assessment of the operational condition of Federal waterways and navigation systems.
 - e. Identify capability gaps and provide redundant capabilities through identification of deployable assets.

- f. Enact procedures and prioritization for deployment of resources where assets are required in emergency or disaster events
- WEATHER CONDITIONS
 - a. Tropical Storm Force Winds: Winds from 39 - 73 miles per hour (mph) or 34 - 63 knots.
 - b. Tropical Storm Watch: Threat of tropical storm force winds expected within 48 hours.
 - c. Tropical Storm Warning: Tropical storm conditions expected within 36 hours.
 - d. Hurricane Watch: Hurricane conditions expected within 48 hours.
 - e. Hurricane Warning: Sustained winds greater than 74 mph or 64 knots expected within 36 hours.
- USCG PORT CONDITIONS:
 - a. **Port Condition Whiskey (72 hours prior to landfall):** Set when tropical storm force winds are expected to arrive at the port within 72 hours. Port remains open to all commercial traffic, but oceangoing ships and barges greater than 200 gross tons must report their intention to remain in port or depart. If vessels are departing, they must do so before 12 hours from the onset of tropical storm force winds.
 - b. **Port Condition X-Ray (48 hours prior to landfall):** tropical storm force winds are expected within 48 hours. Vessels greater than 200 gross tons must make plans to leave port within 36 hours. Facilities must make plans to secure over-the-water operations within 36 hours. National Weather Service Storm Category, WATCH.
 - c. **Port Condition Yankee (24 hours prior to landfall):** tropical storm force winds predicted within 24 hours. Vessels seeking to depart must arrange immediate departure. Port closed to incoming traffic, without Captain of the Port approval. Ships seeking to arrive in port should seek an alternate destination. Over-the-water cargo operations must cease with 40 mph winds. Transfer hoses must be disconnected with 50 mph winds. National Weather Service Storm Category, WARNING.
 - d. **Port Condition Zulu (12 hours prior to landfall):** tropical storm force winds expected within 12 hours. The port is closed to all traffic. National Weather Service Storm Category, WARNING.
- PROPER EMERGENCY PROTOCOL AND PROCEDURES FOR OUR HARBORS AND HARBOR USERS SHOULD POTENTIAL DISASTERS THREATEN THE STATE.
 - a. For vessels wanting consideration for berthing during Hurricane Season, their 2019 Statewide safe harbor plan is required to be filed by June 1, 2019 (N/R May 1, 2019)
 - a. Vessel Heavy Weather Plan (USCG 46 CFR 44.01-13)
 - b. Ocean Marine Insurance (HRS 431:1-211)
 - c. General Liability Insurance (HAR 1-42-37)
 - d. Performance bond

- b. Idle/not in commercial operation vessels are to depart Honolulu Harbor. (On-going)
 - a. Performance bond based on marine survey appraisal.
 - b. Departure date and plan.

BACK-UP

Notification of Incoming Storm Conditions: In advance of the declaration of Port Condition Whiskey, USCG MTSRU will issue an e-mail notification to the Navigation Response Team of incoming weather. At this time, Navigation Response Team members will verify the availability of each agency's assets prior to the coordination outlined below.

ROLES AND RESPONSIBILITIES

- PORT CONDITION WHISKEY (72 HOURS PRIOR TO LANDFALL):
 1. Initial Coordination: USCG will convene and coordinate the meeting of the Navigation Response Team (responsible offices and field units identified in Section 6.1.) via teleconference, as necessary, as inclement weather approaches. Coordination of the Navigation Response Team should begin concurrent with or before declaration of Port Condition Whiskey.
 2. Identification of Capabilities: The Navigation Response Team will identify capabilities and available assets at affected ports based on the predicted storm track. An initial assessment of existing capabilities is summarized in Attachment 1. Capabilities and assets including in-port resources and deployable assets will be identified and confirmed during the initial coordination. This includes the following:
 - a. USACE: USACE holds standing contracts for Architecture and Engineering (AE) hydrographic survey capabilities. Teams can be deployed anywhere within the Honolulu District area of responsibility, but cannot be prepositioned. The availability of surveyors, vessels, and equipment can be confirmed in advance. In addition, USACE performs bathymetric surveys in various designated Federal waterways each year and holds the survey records for comparative purposes. USACE can also deploy engineering expertise post-storm for technical support, upon request.
 - b. USCG: USCG utilizes the RDLP for port assessment capabilities. The RDLP requires scheduling and approval for use, a vessel, and has single beam echo-sounder and side-scan sonar capabilities for performing hydrographic surveys. The MSST can provide a vessel for the RDLP and 2 ROVs for assessing anomalies as they are found. Both the RDLP and MSST are under Tactical Control (TACON) of USCG Sector Honolulu (vis a vis MTSRU) during an emergency. All requests for RDLP/MSST will go through USCG Sector Honolulu.
 - c. NOAA: The NOAA Office of Coast Survey maintains a Mobile Integrated Survey Team (MIST) consisting of staff of trained responders with single beam and multi-beam echo-sounders and side-scan sonar capabilities available for deployment. The MIST team can be deployed and pre-positioned with their equipment but requires a vessel for work within the Hawai'ian Islands. A request from the USCG Captain of the Port for assistance is necessary.

- d. State of Hawai‘i, Department of Transportation (HI-DOT): HI-DOT holds assets in the form of vessels and side scan sonar survey capabilities on the islands of Oahu, Kauai, Maui, and Hawai‘i. These assets are capable of addressing obstruction identification survey needs of multiple ports on each island and can be mobilized where necessary. HI-DOT also has reach-back capabilities to Counties for vessels and equipment which can be verified during the Port Condition Whiskey coordination. In addition, HI-DOT employs Harbormasters at each District who are capable of performing visual inspections post-storm.
3. Prioritization of Available Assets: An initial prioritization of assets by harbor is included in Attachment 1. Based on the availability of assets, the Navigation Response Team will re-assess the prioritization and update as necessary.
- PORT CONDITION X-RAY (48 HOURS PRIOR TO LANDFALL): On-going coordination and planning will continue. Requests for deployable assets will be made at this time (see Attachment 2 for request template). Requested assets from outside of the State of Hawai‘i will make travel arrangements.
 - PORT CONDITION YANKEE (24 HOURS PRIOR TO LANDFALL): On-going coordination and planning will continue. Requested assets from outside of the State of Hawai‘i will arrive in Honolulu. Deployable assets will make travel arrangements to outer islands based on the storm track and priorities identified by the Navigation Response Team.
 - PORT CONDITION ZULU (12 HOURS PRIOR TO LANDFALL): Deployable assets will be delivered to affected ports, as necessary. Vessels to support deployed assets will be identified.

POST-STORM RESPONSE:

- Visual Assessment: Visual assessment of harbors will be performed immediately following the storm by the Harbormaster, USCG, HI-DOT, and other qualified personnel. Responsible parties will assess the condition of navigation channels, waterways and on-shore facilities to determine whether a hydrographic survey is necessary. Results will be conveyed to the Navigation Response Team on a subsequent teleconference call.
- Hydrographic Surveys: The scope and need of hydrographic surveys will be determined by the Navigation Response Team with consultation from the Harbormaster. Hydrographic surveys will focus on identifying obstructions within the Federal waterway utilizing side scan sonar, but can be further expanded to areas outside of the Federal waterway to include on-shore facilities at the convenience of the owner of the asset and capabilities of the survey team, and/or the use of echo sounders to obtain depth information of shoaled areas or identified obstructions.
- Survey Evaluation: The results of all hydrographic surveys will be compiled and shared with the Navigation Response Team. Comparisons of pre-storm and post-storm bathymetric surveys can be completed by USACE as necessary.

- Post-Survey Coordination: The Navigation Response Team will convene to review material received from hydrographic surveys and identify any follow-on actions. The USCG has authority to disseminate and maintain navigational safety information pertaining to obstructions and is the lead agency responsible for this type of information. The USCG and USACE field units will immediately notify their counterpart of any reported obstructions and will maintain close coordination to ensure that navigational safety information is disseminated in a timely and effective manner.
- Reopening of Ports: Based on the survey assessment information received by the Navigation Response Team, the USCG will determine the appropriate time to reopen ports. Notification to MTSRU will be made to/through regularly scheduled calls.

Thank you for the opportunity to provide information related to harbors and harbor users should potential disasters threaten the State.