



## **Marine Safety Information Bulletin**

**02-09**

**2009 Hurricane Season**

**June 1, 2009**

The hurricane season runs from 1 June to 30 November of each calendar year. The 2009 season is upon us and I remind the maritime public of the magnitude and destructive potential of a hurricane. I encourage everyone to take a thoughtful and critical look at your organization's preparedness and readiness. This preparedness should include review of disaster/contingency plans and briefing of personnel on evacuation routes, pre-storm precautions, safe havens and recovery processes.

All mariners should have severe weather procedures worked out in advance. All vessels capable of sailing away from a storm should be prepared to do so at any time and those not capable of sailing away need to make safe harbor arrangements well in advance of a storm's approach. Offshore oil and gas platforms, facilities and supply vessels should review their Emergency Evacuation Plans (EEPs) and verify all information to be accurate and up to date. In addition, facility operators are reminded to keep all containment tanks and berms promptly pumped out during this period to prevent spills as a result of heavy rain.

To assist you in your planning, I recommend the following resources:

The National Weather Service (NWS) maintains a detailed web site with local information regarding severe weather conditions in the Coastal Bend. The link is:

<http://www.srh.noaa.gov/crp/tropics/default.html>

The Federal Emergency Management Agency (FEMA) published an excellent resource for planning and preparedness, entitled "Are You Ready?" The link is:

<http://www.fema.gov/areyouready/>

The provisions of Title 33, Code of Federal Regulations, Parts 160 and 165, describe the authority Coast Guard Captains of the Port (COTP) can use to ensure the safety of their port. Specifically, COTPs are authorized to:

- establish safety zones;
- direct the handling, loading, unloading, storage and movement of dangerous cargoes aboard waterfront facilities; and
- order vessels to operate or anchor, in whatever manner is necessary to protect life, property, and the environment.

This bulletin is applicable to all waterfront facilities and vessels within the COTP Corpus Christi, Texas Zone defined in Title 33, Code of Federal regulations, Part 3.40-35.

You should familiarize yourself with this bulletin's enclosures. Enclosure 1 explains the different port conditions that the COTP will set ahead of an approaching hurricane. The second, third, and fourth enclosures are checklists that you are encouraged to use to help with your hurricane preparedness. Enclosure 5 must be completed and returned to the Coast Guard ahead of a hurricane by vessels requesting to stay in port during a storm.

Following a formal annual review, Coast Guard Sector Corpus Christi will incorporate amendments into its Severe Weather Plan. However, suggestions and changes may be offered at any time. Please address all correspondence regarding this issue to Commander, Coast Guard Sector Corpus Christi, Attn: Planning Staff, 555 N. Carancahua Street, Suite 500, Corpus Christi, TX 78478.

The best way to get through a hurricane season is to ensure our people and our organizations are prepared for the worst possible scenarios. Vigilance should be your watchword during this dangerous time of year. I know all of you will treat this with the seriousness it deserves.



R. J. PAULISON  
Captain, U.S. Coast Guard  
Captain of the Port

- Enclosure: (1) COTP Actions and Decisions  
(2) Storm Preparation Checklist --Vessels  
(3) Recommended Storm Preparations Checklist -- Vessels and Barges  
(4) Storm Preparation Checklist -- Waterfront Facilities  
(5) Remaining in Port Checklist

## COTP ACTIONS AND DECISIONS

Port Conditions are set by the COTP of Corpus Christi in advance of arriving tropical storms and are based on the predicted arrival of hurricane force winds in South Texas. The COTP will normally seek input from Port Authorities, Harbor Masters and Pilots prior to setting and/or changing Port Conditions. Due to the large area of responsibility (AOR), the COTP may set different Port Conditions at different ports within the AOR. Tropical storm predictions are based on information obtained from the National Weather Service. The intent of setting Port Conditions is to provide the marine community with sufficient time to make preparations in order to minimize damage from a tropical storm.

### **Port Conditions**

The four Port Conditions are:

- **WHISKEY:** Gale force winds associated with tropical cyclone activity are expected to arrive at the port within 72 hours.
- **X-RAY:** Gale force winds associated with tropical cyclone activity are expected to arrive at the port within 48 hours.
- **YANKEE:** Gale force winds from a hurricane force storm are expected to arrive at the port within 24 hours.
- **ZULU:** Gale force winds from a hurricane force storm are expected to arrive at the port within 12 hours.

### **Information Sources and Communications**

The COTP will make information about changes in Port Conditions available to the port community in the following ways:

- Broadcast Notice to Mariners (BNTM) on Channel 16 VHF-FM.
- Direct telephone calls to respective Port Authorities, Harbor Masters and Pilot Associations.
- A regularly updated, recorded telephone message will identify the Port Condition currently set and the time it was established. The recorded message will be available 24 hours a day, 7 days a week at **361-939-6200/6300** (press 1, press 3, press 4) or **1-800-874-2143**.
- Internet site. <http://homeport.uscg.mil> (Select Corpus Christi from the Port Directory).
- Sector Corpus Christi port stakeholders with questions about Port Conditions can contact the Sector Command Center at 361-939-6393.

### **Specific Pre-Storm Actions**

**Seasonal Alert:** The alert condition is automatically set annually on June 1<sup>st</sup> and remains in effect through November 30<sup>th</sup>, unless otherwise established.

- Review individual storm and heavy weather plans, training, and materiel condition.
- Ensure vessels under construction, repair or otherwise in lay-up status are prepared to withstand hurricane conditions.

**WHISKEY** (72 hours):

- Port Status: Open to all commercial traffic.
- COTP will require all self-propelled ocean going vessels over 500 GT and all oceangoing barges and their supporting tugs over 500 GT to report their intentions to depart or remain in port to the COTP. Any vessel requesting to remain in port must complete a

**ENCLOSURE ( 1 )**

REMAINING IN PORT CHECKLIST and submit it to the COTP within 24 hours for approval. Vessels desiring to remain in port must coordinate their request to remain in port with the facility at which they intend to moor. Facilities need to recognize that one of the natural consequences of their decision to engage in commerce during the hurricane season, especially with tug and barge units, may be that a vessel may remain moored to their facility during the tropical storm. Facility operators are advised that the COTP will not order vessels to depart the facility if doing so would unduly hazard the vessel, and that the COTP will not order out barges and their tugs or prevent them from seeking a harbor of safe refuge. Normally, deep draft commercial vessels greater than 500 gross tons will leave the port unless they have received the COTP's permission to remain. The COTP will not arbitrate disputes between facilities and vessels regarding mooring arrangements.

- Commence increased harbor patrols, and advise vessel and facility operators of any conditions that require correction.
- Depending on storm conditions and predictions, the COTP may rescind all over-size tow permits.
- Advise port stakeholders of intentions for setting next condition (X-RAY).

**X-RAY (48 hours):**

- Port Status: Open to all commercial traffic.
- Individually assess REMAINING IN PORT CHECKLISTS from vessels desiring to remain in port and the facilities they will be moored to, issue COTP Orders as appropriate.
- Contact deep-draft vessels at anchor to determine their intentions.
- Inspect wharf and pier areas with waterfront facility representatives during harbor patrols.
- Spot-check marinas and waterways to determine the status of hurricane preparations.
- Depending on storm conditions and predictions, the COTP may rescind all over-size tow permits.
- Depending on storm conditions and predictions, the COTP may order vessels to cease cargo operations, and direct vessels to break away and make heavy weather preparations.
- Advise port stakeholders of intentions for setting next condition (YANKEE) including degree of vessel control.

**YANKEE (24 hours):**

- Port Status: Vessel traffic control measures in effect.
- Determine the need for a Safety Zone controlling vessel movements and activities as appropriate.
- Approve or direct, as necessary, final mooring arrangements for all commercial vessels remaining in port.
- Port will be closed to all inbound commercial vessel traffic; the decision to close the port will be made after consultation with Port Authorities, Harbor Masters and Pilots.
- The COTP may approve requests for inbound transits if vessels are capable of completing the load/discharge cycle in less than 12 hours.
- All over-size tow permits are rescinded.
- All offshore lightering is to cease, and vessels are to break away and make heavy weather preparations.

**ZULU (12 hours):**

- Port Status: Closed to all commercial vessel traffic (including vessel transits within the port). Vessels and facilities requesting a vessel movement must request prior approval from the COTP. The approval will only be granted if the movement can be made safely

and a mooring location has been identified; or if the vessel is departing to sea and can reach safe water prior to encountering winds from a hurricane force storm.

- Suspend all cargo operations, unless individual approval is received from the COTP.

## **Post Storm Actions**

As soon as practicable following the passage of the storm, the COTP will:

- With the exception of search and rescue and environmental response, focus all resources on restoration of commercial operations.
- Determine the priority for reopening channels and waterways (MSIB 06-05).
- Coordinate completion of channel surveys with ACOE, Port Authorities, Harbor Masters, and Pilots.
- As soon as practical set port condition YANKEE in consultation with the Port Authorities, Harbor Masters and Pilots, opening commercial shipping channels with appropriate limitations (Safety Zones) as each channel and waterway is surveyed and deemed suitable for transportation.
- Conduct maritime damage and risk assessment emphasizing bridges, wharves, piers, channels, and anchorage.
- Maintain presence in Incident Command Structure at the appropriate level.

## **Recommended Storm Preparations**

Vessels and facilities that choose to operate and/or engage in commerce during hurricane season must recognize and prepare for the associated risk. Vessels and facilities shall take precautionary measures to reduce the potential for loss of life, injury, or property damage from a hurricane. The safety precautions addressed in this bulletin are not the only precautions that may be necessary to fully prepare a vessel or facility for a tropical storm. The unique characteristics of the vessel or facility, and the unique attributes of the storm may dictate the need for additional measures and/or modifications to the measures contained in these recommendations.

The COTP will continuously review the status of all hurricane preparations (vessel and facility) and direct the correction of dangerous conditions. The COTP will issue orders only to those vessels or facilities that fail to initiate timely and appropriate action.

Nothing in these recommendations shall be construed as relieving the masters, owners, operators, and agents of vessels or the owners, operators, and persons-in-charge of waterfront facilities from their primary responsibility for the safety of such vessels or waterfront facilities during a hurricane.

### **VESSELS**

When gale force winds associated with tropical cyclone activity and severe storm surge threaten the port, the recommended course of action for all seaworthy vessels is evasion at sea. Departure to sea should commence well before the expected arrival of hurricane force winds to allow for safely riding out the storm at sea or having adequate time to reach a harbor of safe refuge. Late departure could endanger personnel, the port, or the environment, and may not be allowed by the COTP. Vessels will not be permitted to move (including shifting berthing) during the 12-hour period immediately prior to the predicted arrival of gale force winds (i.e. during Port Condition ZULU) without the prior approval of the COTP. The decision to approve a vessel movement during Port Condition ZULU will be made in consultation with the respective Port Authority, Harbor Master and Pilots.

All vessels, which intend to remain in port, should consider the appropriateness of taking on additional ballast or cargo as a special precaution to ensure their safety and the overall safety of the port, because vessels in a fully loaded condition normally fare better than light vessels in hurricanes. The COTP will not arbitrate disputes between facilities and vessels regarding mooring arrangements. The COTP will continuously review the status of all hurricane preparations (vessel and facility) and direct the correction of dangerous conditions. The COTP will issue orders only to those vessels that fail to initiate timely and appropriate action.

### **WATERFRONT FACILITIES**

Waterfront facilities should secure hazards and halt cargo operations in advance of the storm's arrival to prevent unnecessary damage to life, property or the environment. When Port Condition ZULU is set, the COTP will suspend all cargo operations, unless specific approval is granted. The COTP may also suspend operations when weather conditions threaten to reduce safety to an unacceptable level and/or the facility does not voluntarily suspend cargo operations. Facilities that do not desire to have vessels remain moored at their facility during the storm must provide sufficient notice to the vessel to allow time for the vessel to move to a safe mooring, a hurricane anchorage, or sea. The owner, operator and/or person-in-charge of a facility and the masters, owners, operators, and/or agents of a vessel are primarily responsible for the safety and security of their facilities and vessels. The COTP will not arbitrate disputes between facilities and vessels regarding mooring arrangements. The COTP will continuously review the status of all hurricane preparations (vessel and facility) and direct the correction of dangerous conditions. The COTP will issue orders only to those facilities that fail to initiate timely and appropriate action.

### **WATERFRONT FACILITIES: Shipyards / Fabrication Facilities**

Shipyards should secure or remove missile hazards, such as scaffolding, equipment and scrap metal, and halt construction/repair operations in advance of the storm's arrival to prevent unnecessary damage to life, property or the environment. Fabrication facilities with floating construction projects shall also submit a remaining in port checklist to the COTP, specifically addressing mooring arrangements. When Port Condition ZULU is set, the COTP will suspend all construction/repair operations, unless specific approval is granted. The COTP may also suspend construction/repair operations when weather conditions threaten to reduce safety to an unacceptable level and/or the shipyard does not voluntarily suspend operations. Shipyards must ensure that vessels at drydock are secured, or repaired in sufficient time to allow the vessel to move to a safe mooring, hurricane anchorage, or to sea. The COTP will issue orders only to those shipyards that fail to initiate timely and appropriate action.

# STORM PREPARATION CHECKLIST FOR VESSELS

This checklist contains precautionary measures appropriate to ships and barges, which intend to remain in port.

## I. PORT CONDITION WHISKEY 72 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Review vessel's operational schedule.
			(b) Review vessel heavy weather plans and take appropriate action.
			(c) If unable to get underway, evaluate the safety of the present berth. If necessary, develop plans to shift to an alternate location or berth. The plans should include the number and source of tugs, the permits required and the agency responsible for approving them, and safety/security arrangements appropriate to the new mooring/berth. Note: Vessels to which this recommendation might apply are vessels at local repair facilities and lay berth vessels either at anchor or moored to a wharf or pier.
			(d) Inform COTP of intentions, submit Remaining in Port Checklist.
			(e) Set a continuous Channel 16 VHF-FM radio watch.

## II. PORT CONDITION X-RAY 48 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Vessels intending to remain at their moorings during the hurricane should obtain permission from the COTP, and coordinate with owner, operator, or person-in-charge of the waterfront facility and determine the conditions the facility will require.
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## III. PORT CONDITION YANKEE 24 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Vessels intending to weather the hurricane at sea should prepare to depart the port prior to port closure.
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## IV. PORT CONDITION ZULU 12 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Ensure the vessel is securely moored or anchored and prepared for hurricane conditions.
			(b) Suspend cargo transfer operations as required by weather conditions or the COTP.
			(c) Discontinue all transits of the port as required by the COTP.
			(d) Immediately report any hazardous conditions or breakaways of vessels directly to the COTP.

## RECOMMENDED STORM PREPARATIONS

### VESSELS

Moored	Anchored		
X		1.	Mooring lines doubled up with due consideration given to the effects of predicted storm surge.
X		2.	Outboard anchor rigged at short stay.
X	X	3.	Sufficient number of officers and crew onboard to tend mooring lines, and/or get underway.
X	X	4.	Ballast vessel to ensure maximum safety.
X	X	5.	All side ports, hatches, portholes, and other openings are closed and secured.
X	X	6.	Bilge pumps and manifolds are ready for immediate use.
X	X	7.	All fire fighting equipment is ready for immediate use.
X	X	8.	At least one (1) pilot ladder is rigged on each side of the vessel.
X		9.	A gangway, or other suitable means of accessing the vessel from the pier, is rigged.
X	X	10.	At least one (1) fire warp is rigged on the bow and another on the stern. In order to expedite the establishment of an emergency tow, a portion of each fire warp should be draped overboard and allowed to hang no more than six (6) feet above the waterline.
X	X	11.	Spare mooring lines and/or wires should be readily available.
X	X	12.	A continuous radio watch should be maintained on Channel 16 VHF-FM (156.8 MHZ) by a person who speaks English fluently.
	X	13.	At least two anchors should be set.
	X	14.	Vessel should remain ready to get underway in 15 minutes.

## RECOMMENDED STORM PREPARATIONS

### BARGES

Moored	Anchored		
	X	1.	All available anchors are deployed.
X		2.	Mooring lines doubled up with due consideration given to the effects of predicted storm surge. Special attention should be paid to barges moored in the proximity of bridges.
X		3.	Sufficient personnel are available ashore to respond to emergencies. Note: In no way should this recommendation be understood as the COTP advocating personnel being placed in life threatening situations.
X	X	4.	All hatches, portholes and other openings are closed and secured.
X		5.	Fire fighting equipment is available and ready for immediate use.
	X	6.	At least one (1) fire warp is rigged on the bow and another on the stern. In order to expedite the establishment of an emergency tow, a portion of each fire warp should be draped overboard and allowed to hang no more than six (6) feet above the waterline.
X	X	7.	Spare mooring lines and/or wires should be readily available.



# STORM PREPARATION CHECKLIST FOR WATERFRONT FACILITIES

This checklist contains detailed precautionary measures appropriate to waterfront facilities.

## I. PORT CONDITION WHISKEY 72 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Review facility contingency plans. The contingency plans for barge fleeing facilities should contain procedures for recovering breakaway barges and specifically include the location or availability of tugs/towboats. Barge fleeing facilities should also evaluate measures to reduce the size of their fleets. Note: Plans to nest barges with other vessels must be approved by the COTP.
			(b) Review vessel arrival schedule.
			(c) Review operational schedules to identify shipments of Cargoes of Particular Hazard, Hazardous Material, and/or Dangerous Cargoes arriving via highway or rail vehicles.

## II. PORT CONDITION X-RAY 48 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Determine the special needs and intentions of vessels moored at the facility. Note: The COTP may direct the vessel or facility to take certain precautions to correct conditions, which threaten the port or the environment.
			(b) Set a time for the voluntary suspension of cargo handling operations. In doing so, ensure that vessels have ample time to hire and schedule labor, arrange pilots, contract tugs/towboats, and safely complete the transit to sea or a hurricane anchorage prior to the setting of Port Condition ZULU. Notify the COTP of the time established.

## III. PORT CONDITION YANKEE 24 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Secure missile hazards and clear nonessential equipment and loose gear from all wharves and piers.
			(b) Secure or move hazardous material and dangerous cargo to a safe location.
			(c) Advise the COTP of any dangerous cargo that cannot be secured or moved to a safe location.
			(d) Prepare to secure cargo operations in advance of the COTP setting Port Condition Zulu, unless permission is requested and an approval is received from the COTP. Operations involving Cargoes of Particular Hazard will be secured without exception at Port Condition Zulu.
			(e) Ensure cargo operations are secured in adequate time to allow vessels desiring to depart port have ample time to make the necessary arrangements and complete the transit to sea.

## IV. PORT CONDITION ZULU 12 HOURS BEFORE ANTICIPATED LANDFALL

DATE/TIME/INITIALS

			(a) Secure cargo operations involving liquid bulk dangerous cargoes, unless permission is granted and verification is received from the COTP. Cargoes of Particular Hazard will be secured in all cases.
			(b) Oil transfer terminals should drain all loading arms and transfer hoses of product, blank off hoses, empty and clean small discharge containment.
			(c) All small craft owned by the facility that can be hauled out should be removed from the water and secured well away from the effects of possible storm surge and high winds.

**U. S. Coast Guard Sector Corpus Christi  
Corpus Christi, Texas  
Remaining in Port Checklist**

The person in charge of the self-propelled vessel, barge or assist tug must submit this checklist, to the COTP less than 24 hours after Port Condition WHISKEY is set.

<b>1) Vessel Name:</b>
<b>2) Official Number:</b>
<b>3) Call Sign:</b>
<b>4) Flag of Vessel:</b>
<b>5) Length:</b>
<b>6) Width:</b>
<b>7) Draft:</b>
<b>8) Gross Tonnage:</b>
<b>9) Hull Type:</b>
<b>10) Horsepower:</b>
<b>11) Name of Berth, Location and Depth of Water at Mean Low Water:</b>
<b>12) Master's Name:</b>
<b>13) Name, Address, and Phone number of Owner:</b>
<b>14) Name, Address, and Phone number of Charter Point of Contact:</b>
<b>15) Name, Address, and Phone number of Agent:</b>
<b>16) Reason for Remaining in Port:</b>

**17) 24-Hour contact number for Qualified individuals who are empowered in writing by the owners to make on-site decisions and authorize expenditures of any required pollution response or salvage.**

**18) Amount of ballast the vessel may hold and estimated draft with the vessel in ballast:**

**20) Amount of bunkers, lube oil, and diesel oil on board:**

**21) Amount and types of cargo on board:**

**22) Persons remaining on board and their qualifications:**

**Attach the following items:**

**A) Full vessel characteristics that would be needed to effect salvage.**

**B) Full stowage plan and manifest.**

**C) Full insurance coverage disclosure to the Captain of the Port and if moored to a facility, to the facility.**

**D) Describe how the vessel will be secured to the berth. Submit a diagram showing the mooring arrangements with the size, length and lead of mooring lines or wire.**

**E) Operational status of machinery on board the vessel (i.e. availability of main propulsion, engines, generators, fire fighting pumps, bilge pumps, anchors and number of anchors, mooring machinery, etc.)**

**F) Any unusual conditions affecting the vessel's seaworthiness.**

**G) Crew Manifest if applicable.**

**Commander, Sector Corpus Christi  
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361 939 6377 fax**