

U.S. Department of  
Homeland Security

United States  
Coast Guard



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23 May 2006

From: COTP Sector Delaware Bay, Philadelphia, PA  
To: Port Maritime Community

Subj: COTP SECTOR DELAWARE BAY PORT HURRICANE CONTINGENCY PLAN;  
LETTER OF PROMULGATION

Ref: (a) Ports and Waterways Safety Act (33 USC 1221)  
(b) Sector Delaware Bay Hurricane Readiness Instruction  
(c) Fifth Coast Guard District OPLAN 9750-02, Annex C

1. PURPOSE. This plan has been prepared to provide planning guidance to, and define response actions which should be initiated by, the Coast Guard and maritime community in the event a hurricane impacts the Captain of the Port, Philadelphia zone. It has been updated to align the condition names and actions within the Fifth District (Captain of the Port Zones for Hampton Roads, VA, Baltimore, MD, and Philadelphia, PA). This plan is intended to facilitate preparations prior to a hurricane's arrival as well as post-hurricane recovery operations. This plan provides for a coordinated response to actions within the zone.

2. ACTION.

a. This plan and the preparedness activities described within will be coordinated with local agencies, authorities and associations representing the marine community. Assistance has been requested for preparedness and recovery actions taking into account the inherent interests and memberships of those organizations.

b. All personnel assigned to Sector Delaware Bay shall become familiar with the provisions set forth in this plan.

c. All other Coast Guard units, federal, state, and local agencies, and other interested members of the maritime community within the COTP Sector Delaware Bay zone should review the applicable portions of this plan.

d. Comments and recommendations regarding this instruction are invited and should be addressed to USCG Sector Delaware Bay's Operational Planning and Force Readiness Staff, at the above address and/or telephone number.

3. DIRECTIVES AFFECTED. This plan is effective upon receipt and supersedes all previous MSO/Group Philadelphia Port Hurricane Contingency Plans dated 9 May 1997. This plan has been developed to be complimentary with the local hurricane preparedness plans of Coast Guard Sector Field Office, Cape May, NJ, CCGD5 OPLAN, LANTAREA OPLAN and Marine Safety Detachment Lewes, DE. It is also complimentary to Ref (b) which is for internal CG preparations. The COTP also administers three additional contingency plans that may affect response considerations during use of this plan: (1) Area Contingency Plan (ACP), (2) Maritime Firefighting Plan and (3) Area Maritime Security Plan (AMSP).

4. DISCUSSION. The nature and diversity of hurricanes make it impossible to predict their size, speed, or intensity until just before arrival. Some extreme weather conditions may affect the COTP Philadelphia zone with less than 24 hours advance warning. Due to our inability to predict these factors, this plan should be used with extreme flexibility and regard to a rapidly changing situation. An early arrival of a hurricane could result in additional damage to property, injuries, and even significant loss of life. Hurricanes in recent years have clearly demonstrated their destructive power and cannot be taken lightly. It is imperative that all attempts be made to prepare properly for the arrival of any hurricane. This plan should be used by all concerned parties during an incident as both a guide and a source of information.

a. Planning serves to focus all existing personnel, material, and resources on the efficient mitigation of a threat to the port communities as well as the rapid recovery in the post-hurricane period. Successful implementation of this plan depends upon the cooperation of all parties involved in the maritime community.

b. An open exchange of ideas will help keep this plan current and provide for an organized and effective response action. Any user or reviewer of this plan should contact this office if any error or omission is noted so that other users may benefit and the impact of the incident may be reduced.



D. L. SCOTT  
Captain, U.S. Coast Guard  
Captain of the Port Sector Delaware Bay

Encl: (1) USCG COTP Sector Delaware Bay Port Hurricane  
Contingency Plan

Copy: Distribution (list attached)

**USCG COTP Sector Delaware Bay  
Port Hurricane Contingency Plan**

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**PLAN DISTRIBUTION**

USCG Sector Delaware Bay

- Sector Commander/Deputy Sector Commander
- Response Department
- Prevention Department
- Logistic Department
- Operational Planning & Force Readiness Staff
- Sector Command Center
- Sector Field Office Atlantic City
- USCGC Cleat
- USCGC Capstan
- USCGC Finback
- USCGC Mako
- USCGC Ibis
- ANT Philadelphia
- Station Philadelphia
- Station Cape May
- Marine Safety Detachment, Roosevelt Inlet, DE

USCGC WILLIAM TATE

Fifth Coast Guard Auxiliary District (Northern Region)  
Commander, Fifth Coast Guard District

- Marine Safety
- Operations
- Command Center
- Planning

USCG ISC Portsmouth, VA

USCG Sector Baltimore

USCG Sector Hampton Roads

USCG Sector New York

USCG Air Station Atlantic City

USCG Sector Field Office Eastern Shore

Federal Emergency Management Agency, Region II

Federal Emergency Management Agency, Region III

Delaware Emergency Management Agency

Pennsylvania Emergency Management Agency

New Jersey Office of Emergency Management

U.S. Army Corps of Engineers, Philadelphia District

Maritime Exchange for the Delaware River & Bay

Mariners' Advisory Committee for the Bay and River Delaware

Pilots' Association for the Bay and River Delaware

Interport Pilots Agency, Inc.

Delaware River Docking Pilots Association

Delaware River Port Authority

Delaware River & Bay Authority

Philadelphia Regional Port Authority

South Jersey Port Corporation

Ship's Agents



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**SECTION 100 - INTRODUCTION**

101. **Purpose and Objective:** The purpose of this plan is to present a comprehensive contingency plan to be implemented during the approach of a hurricane as may be determined by the Captain of the Port (COTP). The response actions detailed within this plan should be taken before, during, and after the passage of a hurricane to minimize the danger to the COTP Sector Delaware Bay zone.
102. **Scope:** This Hurricane Contingency Plan is applicable to the coastal areas within the geographic boundaries of the COTP Sector Delaware Bay, Philadelphia, Pennsylvania, zone as defined by Title 33 Code of Federal Regulations (CFR) Subpart 3.25-05. This area includes the Delaware River and Bay, the coast of Delaware and portions of the coast of New Jersey, all adjacent navigable waters in the states of Delaware, portions of New Jersey and eastern Pennsylvania including the Intercoastal Waterway.
103. **Authority:** Under the provisions of the Ports and Waterways Safety Act (33 USC 1221), as implemented by 33 CFR Parts 6 and 160, the COTP may direct the handling, loading, storage, and movement on any structure or shore area on or in the navigable waters of the United States, or any land structure or shore area immediately adjacent to those waters. Additionally, the COTP may order a vessel to operate or anchor in the manner directed when the determination is made that such an order is justified by reason of weather, visibility, sea conditions, temporary port congestion, or other temporary hazardous circumstances, or the condition of the vessel.
104. **Winter Storms:** Severe winter storms and "northeasters" with hurricane-like conditions are not uncommon in the COTP Sector Delaware Bay Zone. The COTP may implement appropriate portions of this plan in preparation and response to the approach of these storms, for the safety of the port. Time permitting; the COTP will consult with the port community prior to implementing restrictive actions.

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**105.        Definitions:**

- .1.        Conditions of Readiness: Maritime Hurricane Conditions are storm classifications to indicate the speed of approach prior to landfall. Conditions are, in part, based on predictions by the National Weather Service and imply the time interval remaining before the hurricane force winds are possible in the zone. There are six hurricane conditions defined by the COTP Sector Delaware Bay. Conditions and specific requirements will be provided to the port via the Maritime Exchange and Broadcast Notice to Mariners. Once requirements for a condition are complete, preparations should be made to attain the next higher condition if the situation warrants it.
  - .01 Maritime Hurricane Seasonal ALERT: This ALERT condition is automatically set annually on June 1st and remains in effect through November 30th, unless otherwise modified.
  - .02 Maritime Hurricane Condition WHISKEY: A heightened condition of "READINESS" to indicate hurricane-force winds are possible within seventy-two (72) hours.
  - .03 Maritime Hurricane Condition X-RAY: A hurricane "WATCH" condition of readiness to indicate hurricane force winds are possible within forty-eight (48) hours.
  - .04 Maritime Hurricane Condition YANKEE: A hurricane "WARNING" condition of readiness to indicate hurricane force winds are probable within twenty-four (24) hours.
  - .05 Maritime Hurricane Condition ZULU: A "DANGER" condition to indicate hurricane force winds are expected within twelve (12) hours.
  - .06 Post Hurricane Assessment Phase: The storm has immediately passed through the area and the status of the waterway, facilities and response capabilities are unknown or substantially degraded.

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- .07 Post Hurricane Recovery Phase: The storm is no longer a threat to the area. Either major damage has occurred and recovery operations are required, or minimal damage has occurred and normal operations may resume.
  
- .2. Hurricane: A warm core tropical cyclone in which the maximum sustained surface wind is 64 knots (74 mph) or greater. There are five hurricane categories, as defined by the National Hurricane Tracking Center in Coral Gables, Florida.
  - .01 Category 1: Sustained winds of 74-95 MPH. can produce a storm surge 4-5 feet above normal with low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorages break moorings, no real damage to building structures and some damage to poorly constructed signs.
  - .02 Category 2: Sustained winds of 96-110 MPH can produce a storm surge 6-8 feet above normal with coastal roads and low-lying escape routes inland cut by rising waters 2-4 hours before arrival of the center, considerable pier damage, marinas flooded, some trees blown down, major structural damage to exposed mobile homes, some damage to roofing material, windows, and doors, but no major damage to building structures.
  - .03 Category 3: Sustained winds of 111-130 MPH can produce a storm surge 9-12 feet above normal, serious flooding along the coast, with many smaller structures near the coast destroyed, larger structures damaged by battering of floating debris, low-lying escape routes inland cut by rising water 3-5 hours before the center arrives, some structural damage to small residences and utility buildings, and mobile homes destroyed.
  - .04 Category 4: Sustained winds of 131-150 MPH can produce a storm surge 13-18 feet above normal with major damage to lower floors of structures near the shore due to flooding and battering action, low-lying escape routes inland cut by rising water 3-5 hours before the center arrives, extensive roofing material damage, extensive window and door damage, and complete failure of roof structure on many small residences.
  - .05 Category 5: Sustained winds of greater than 150 MPH can produce a storm surge greater than 18 feet

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above normal, shrubs and trees down, considerable roofing damage, all signs down, very severe and extensive window and door damage, complete failure of roof structures on many residences and industrial buildings, extensive glass failures, some complete building failures, small buildings overturned and blown over or away, and complete destruction of mobile homes.

**HURRICANE CONDITION COMPARISON CHART**

TIME TO LANDFALL	MILITARY CONDITIONS	PORT CONDITIONS	NATIONAL WEATHER SERVICE
SEASONAL ALERT	SEASONAL ALERT	SEASONAL ALERT	N/A
<b>72 HOURS</b>	<b>FOUR</b>	<b>WHISKEY</b>	N/A
<b>48 HOURS</b>	<b>THREE</b>	<b>X-RAY</b>	<b>N/A</b>
<i>36 HOURS</i>	<i>N/A</i>	<i>N/A</i>	<i>WATCH</i>
<b>24 HOURS</b>	<b>TWO</b>	<b>YANKEE</b>	<b>WARNING</b>
<b>12 HOURS</b>	<b>ONE</b>	<b>ZULU</b>	<b>WARNING</b>

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**SECTION 200 - POLICY, RESPONSIBILITY AND ORGANIZATION**

201. **Federal:** Stafford Disaster Relief Act Public Law 93-288 (PL 93-288) is the statute, which authorizes substantial federal assistance as a result of a major non-defense emergency situation. The Federal Emergency Management Agency (FEMA) administers the Federal Emergency Management Program for the President. This includes authority to coordinate and direct disaster relief funds made available to the President. Public Law 93-288 provides for the simultaneous designation of a Federal Coordinating Officer upon Presidential declaration of a disaster area.

During the threat of hurricane conditions, the COTP office will maintain communications with the FEMA Region III (215) 931-5500 and FEMA Region II (212) 225-7018. The Region III Operations Center (ROC) (215) 931-5757 is located in Philadelphia, PA. The FEMA Region II Operations Center (ROC) (212) 225-7207 is located in New York City, New York.

202. **State:** Notification, response and recovery operations for the general public are controlled by local, city, county and governments through Emergency Operations Centers (EOC), coordinated by the general direction and oversight of the respective state Emergency Management Agency (EMA). During the threat of hurricane conditions, the COTP office will maintain communications with the state EMAs and provide representative(s), as necessary, to the appropriate EOCs to maintain direct Coast Guard liaison.
- .1. **Pennsylvania:** The Pennsylvania Emergency Management Agency (PEMA) is located in Harrisburg, PA. The Area EOC in Hamburg, PA at (800) 372-7362. The State EOC is located in Harrisburg at (800) 424-7362 or (717) 651-2001.
  - .2. **New Jersey:** The New Jersey State Police Office of Emergency Management (NJ OEM) is located in Trenton, NJ, at (609)-882-4201.
  - .3. **Delaware:** The Delaware Emergency Management Agency (DEMA) is located in Smyrna, DE, at (302) 659-3362 or (877) 729-3362.

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203. **USCG Sector Delaware Bay:** The Coast Guard, with its existing responsibilities to protect life, property and the environment and its rapid response capability, is uniquely positioned to lead federal operations in coastal areas in the first few days before other federal agencies/commands can mobilize or be given authority to assist. The COTP is responsible for pre-hurricane planning and execution of those operations that will assist in providing safety and security of the ports of Philadelphia.

Coast Guard response operations will be managed primarily by the normal chain of command. Fifth District and MLCLANT will assist and/or respond to the impacted area requirements as requested. Sector Delaware Bay should be prepared to respond, upon District request, to assist other Coast Guard units impacted by the storm.

A major hurricane landfall on the Delaware Capes (Cape May and Cape Henlopen) may result in the relocation of Sector Field Office and Air Station Atlantic City units and elements to the Philadelphia area. Sector Delaware Bay must also be prepared to conduct joint operations, communications, and logistics activities with Sector Field Office and Air Station Atlantic City from the Sector Delaware Bay's Base.

204. **Port Community:** The primary responsibility for natural disaster preparation and response rests with affected individuals, families, private industry, state and local government. This plan provides the general recommended actions to be taken by each member of the marine community, with the ultimate goal of having everyone to be completely prepared for an approaching hurricane **at least six hours prior** to landfall. The Port is considered to be in the safest condition when the vessel population is minimized, when the remaining oceangoing vessels are moored to wharves, and when the open areas of wharves are cleared of possible missile or debris hazards. Section 400 provides detailed guidance for each member of the maritime community and is outlined under the following headings:

- .1. **General:** Guidance, which is generally applicable to, and should be acted upon, by all members.

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- .2. Coast Guard: Provides a general overview of activities being initiated by the COTP office. Further detailed checklists are maintained by appropriate annex(s).
- .3. Vessels: Masters, owners, and operators of vessels retain the ultimate responsibility for the readiness condition of the vessel to withstand hurricane force conditions, whether underway, at anchor, or moored.
- .4. Facilities: Waterfront facility owners and operators ensure the safety of vessels moored at their facility, and the safety of the facility, its personnel, and the surrounding environment.
- .5. Agents: Ships' agents serve as the liaison between the Coast Guard and the vessels remaining in port, either at anchor or moored to a facility.
- .6. Pilots: River, Bay and Docking Pilots provide a vital communications and control connection between the Coast Guard and the vessels transiting and anchored within the port.

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**SECTION 300 - PLANNING AND RESPONSE CONSIDERATIONS**

**301. Plan Review, Revision and Exercise:**

- .1. Plan Review & Revision: Primary responsibility for review and updating this plan rests with COTP Sector Delaware Bay's Prevention Department. Holders of this plan should, however, review the plan, paying particular attention to the portion that most directly affects them. Each holder of this plan is responsible for insuring that their plan is current and up to date. Appropriate response to a hurricane may rest with individual actions of all involved. It is therefore important to insure that all information is correct and current. Please notify Sector Delaware Bay's Operational Planning and Force Readiness office of any errors, modifications or omissions you may discover.
- .2. Exercise: This plan should be exercised during each hurricane preparedness tabletop exercise conducted by federal, state and/or local officials to ensure its completeness and accuracy. Members of the maritime community are highly encouraged to exercise this plan and contact the Sector Delaware Bay's Operational Planning and Force Readiness office when designing and conducting hurricane exercises in preparation of the upcoming seasonal alert.

**302. Historical Considerations:** In this century, Category 4 and 5 storms caused over 80% of all economic damage and deaths from hurricanes even though they comprised less than 10% of all hurricanes. These major storms cause extensive damage to the infrastructure of the impacted area. The damage from 130-mph sustained and turbulent winds can extend inland far past the area of coastal flooding. Community utility systems, schools, civil law enforcement capability, medical facilities, and the economy in general could be seriously affected or incapacitated. The impact on all people can be devastating and requires major disaster relief.

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303. **Local Geography:** The area within the Port of Philadelphia may offer protection from hurricane winds and tidal influences approaching the coastal regions. This may lead to an increase of vessels seeking a safe harbor to ride out the storm. Historically, however, an approaching hurricane has been known to spawn tornadoes in the Philadelphia area and precautions against severe winds should be observed. The low, flat terrain of the COTP Sector Delaware Bay coastal areas are vulnerable to hurricane winds, high tides, flooding, and heavy rains, which accompany these tropical storms. The threat to lives and property is very real. The hurricane tidal front may extend 50-75 miles on both sides of the eye. The storm may curve or re-curve at any point and is potentially dangerous until it has passed 100 miles beyond. The possible existence of tornado force wind gusts in the hurricane force winds zone of the storm greatly increases the danger of "riding out" the storm in unsafe structures. Personnel must remain sheltered during its passage. Vessels underway, improperly moored or anchored within the Captain of the Port Sector Delaware Bay zone during hurricane conditions could damage facilities or other vessels. Therefore, the Captain of the Port, as a preventative measure, has established a list of highly vulnerable areas. These areas include, but are not limited to the following:

- .1. Coastal approaches extending seaward 30 nautical miles.
- .2. Coastal inlets of New Jersey and Delaware.
- .3. Intracoastal Waterway.
- .4. Anchorages on the Delaware River above Ship John Shoal.
- .5. Bridges & overhead power cables, submerged cable and pipeline crossings.

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- .6. Causeways.
- .7. The main shipping channels of the Delaware Bay and River, Schuylkill River, Christina River, and Salem River.
- .8. The C&D Canal and its approaches. Note: The portion of the C&D Canal beyond the MD/DE state line is in the COTP Baltimore zone.
- .9. Bulk liquid oil and chemical facilities, and Designated Waterfront Facilities storing hazardous materials pose the greatest threat of environmental damage to the port during the passage of hurricane conditions. Upon receiving initial notification of an approaching storm, facility operations should include adequate and timely surveys to ensure proper stowage and securing of cargoes and equipment not in operation.

Liquid levels in wastewater and other open-top storage tanks should be minimized in preparation of heavy rainfall amounts.

304. **Vessel Traffic:** Vessel traffic will be allowed to move as long as it is safe to the port and the vessel under existing and pending weather and port conditions. Closure of the waterway should only take place in extreme risk circumstances. Consideration will be given to minimizing the area closed; e.g., upriver closure may not be necessary under certain conditions that warrant the closure of the Delaware Bay entrance. During post hurricane assessment and recovery, emphasis is put on immediate surveys of channel blockage and prioritization of steps necessary to resume essential, then normal, vessel traffic. Restrictions may be placed on movement of vessels and operations of waterfront facilities pending a survey of the channel and aids to navigation to ensure the safe passage of vessels and an assessment of emergency response degradation. This step is essential to mitigate the damaging effect on the port and community as a whole.

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305. **Facilities:** Facilities utilized by commercial vessels should conduct surveys and evaluate the structural integrity of their mooring structures, their sustained wind speed limitations, and vessel size limitations. In addition, they should identify whether vessels may remain at the facility during high wind and storm surge conditions. Results of these surveys should be submitted to the COTP Sector Delaware Bay's Command Center (215) 271-4807 or Faxed to (215) 271-4833. The COTP retains results of these surveys on file for use during planning and emergency operations. During post hurricane recovery it is important for facilities to conduct surveys and evaluations to determine if any hazardous conditions exist and report them to the Captain of the Port.

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**SECTION 400 - RESPONSE ACTIONS**

**401. Response Actions Overview:**

- .1. Preparation: Initial preparation for the arrival of a hurricane is critical to the safety and security of the port and all personnel involved. Timely correction of hazardous conditions may significantly eliminate or reduce the loss of life and property during the heavy weather. It is the responsibility of every agency, organization, and individual in the maritime community to take every precaution to avert potential disaster.
  
- .2. Response: The port community faces six primary response phase tasks; (1) Reestablishment or maintenance of Command, Control and Communication functions (C3) which includes Maritime Transportation Security; (2) Immediate relief for personnel who have experienced catastrophic loss; (3) Restoration of operational capability, especially that which contributes to the immediate relief needs; (4) Establishing an emergency logistics system as necessary to support relief operations; (5) Search and rescue; and (6) Initial damage assessment.

During the time when the hurricane makes landfall and is affecting the COTP Sector Delaware Bay zone, the COTP will monitor the activities throughout the zone from the Command Center (COMCEN) at the Sector Delaware Bay (conditions permitting). The COMCEN will maintain continuous contact with Coast Guard and municipal Search and Rescue units, Marine Safety Detachment Lewes, Sector Field Office Atlantic City, Air Station Atlantic City and the COTP will be in constant communication with other federal, state, and local agencies to insure a coordinated dissemination of information and response to incidents. Additionally, the COTP will have Coast Guard liaisons at Operations Centers established at designated EOCs throughout the port area. Positive and negative findings should be reported ASAP. Private, commercial, and government vessels that are able to render assistance in responding to incidents during and following passage should

report to the nearest Coast Guard unit via radio for response coordination.

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- .3. Recovery: For the entire affected community recovery processes by definition involve numerous agencies and government levels and possibly billions of dollars in costs. Major recovery operations necessitate the joint coordination of federal, state, county, and local members assessing and prioritizing their needs, and requesting necessary assistance through appropriate channels.

Once the danger from the storm has passed, the COTP will begin sending Assessment, Response and Recovery (AR&R) teams to accessible areas of the zone. Each member of the maritime community should also begin to assess the damage caused and report significant pertinent information to the COTP by whatever available communications means. Timely notification can greatly reduce and help mitigate the affects of environmental damage.

- .4. Documentation: AR&R teams shall document all activities using logs, photographs, and any other appropriate means.

**402. Response Preparation:**

- .1. Storm Monitor and Tracking: Upon initial notification of a storm that has potential for affecting the Mid-Atlantic or Northeast region, Sector Delaware Bay will begin tracking the storm. The COTP will set hurricane conditions for the Delaware River. The COTP, in conjunction with Coast Guard Sector Field Office Atlantic City will set hurricane conditions for Delaware Bay and the NJ/DE Atlantic coastal areas.
- .2. Maritime Hurricane Conditions: All marine interests should make timely preparations using conservative estimates of the time required for necessary actions taking into consideration scarcity of personnel, materials, and supplies immediately before and after a hurricane. Hurricanes may accelerate their progress rapidly upon reaching the COTP Sector Delaware Bay zone

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and reliable predictions of course and speed may not be available. Warning time may be significantly reduced without advance warning. Progression from Condition WHISKEY directly to Condition ZULU is quite possible, since accurate hurricane paths are difficult to predict.

- .01 Multiple-Conditions: It is possible that two separate hurricane conditions may exist simultaneously within the COTP AOR, depending on the track and characteristics of the storm. Typically, this would occur if the track of the storm would clearly pass in a northerly direction along the coast with minimal impact on the Delaware Bay or River. Under these conditions, Condition ZULU may be set in the coastal NJ and DE counties, while Condition YANKEE may be set on the Delaware River. All preparations through Condition YANKEE will be completed before this distinction is made, and the distinction between the two areas will only be allowed to exist if the meteorological conditions clearly prevent a westerly change in storm track. The advantage to the lower condition on the Delaware River is that it allows commerce to continue to move on the River and on the C&D Canal.
  
- .02 The condition of readiness of Coast Guard forces may be set at a higher level than those of the port, e.g., CG assets at Condition I (Port Condition ZULU) while the port is at YANKEE (Military Condition II). This may be done to facilitate CG response both in and out of the port. Care must be taken to ensure that the two situations are not confused and for this reason, the naming of the conditions has changed as listed in Section 100.1.
  
- .03 Updates: Once Hurricane Condition WHISKEY is set, each agency or organization is required to take some form of action. During the various hurricane conditions each agency or organization will be notified by the COTP of the changing conditions.

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The COTP will verify that each agency or organization on the distribution list has a current copy of this plan and each should review their pertinent section of the plan and commence initial actions. Once Hurricane Condition WHISKEY is set, subsequent notification of changing conditions will be made using Safety Voice Broadcast on VHF-FM Channels 16 and 22A, Marine Safety Information Bulletins, PortFAXes, Public Service Notices and Maritime Exchange's website (www.maritimedelriv.com). In addition, the National Weather Service broadcasts and updates should be monitored. While each agency and organization that receives initial notification of Hurricane Condition WHISKEY will not be notified individually of the changing conditions, the COTP will be in routine contact with many of them during this time period. Additionally, Sector Delaware Bay may be contacted to determine the current hurricane condition.

**403. Response:**

- .1. Maritime Hurricane Conditions: The pace of response and preparedness must be such that requirements of a given hurricane condition are completed, if at all possible, before storm proximity mandates setting the next condition. Action required by Section 405 should commence immediately upon notification because of the unpredictability of hurricanes. In addition, plans for the next conditions should be reviewed and expected difficulties completing them should be identified in sufficient time to ensure timely completion.
- .2. U.S. Coast Guard Policy: The U.S. Coast Guard is one of several federal agencies that respond to actual or threatened natural disasters or emergencies. The COTP is responsible for the safety and security of the ports within the zone described in Section 200 of this plan. The COTP will oversee actions that are intended to safeguard vessels and facilities against damage that may be caused by hurricanes and heavy weather.

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- .01 Harbor Patrols: Once Hurricane Condition WHISKEY is set, the COTP will deploy harbor patrols throughout the zone. The primary purpose of these patrols is to identify hazardous conditions and notify the responsible party to ensure timely correction prior to the arrival of heavy weather. Both vehicle and small boat will conduct these patrols and their primary focus will be on the commercial maritime aspects of the zone. These targeted areas will be inspected to insure that no significant threat to the safety and security exists.
  
- .02 **ALTHOUGH THE ACTIONS LISTED IN SECTION 405 ARE THE MINIMAL PRECAUTIONS TO BE FOLLOWED FOR THE GIVEN HURRICANE CONDITIONS, THE LISTING IS NOT INTENDED TO BE ALL INCLUSIVE, AND ADDITIONAL PREPARATIONS SHOULD BE INITIATED BY ANYONE AFFECTED BY THE APPROACH OF THE STORM. THE CAPTAIN OF THE PORT MAY IMPOSE ADDITIONAL RESTRICTIONS DURING THE VARIOUS CONDITIONS OF READINESS AS SITUATIONS DICTATE.**

**404. SEASONAL ALERT:**

- .1. General:
  - .01 Review this plan to ensure familiarity upon setting of Condition WHISKEY.
  - .02 All changes and/or updates shall be coordinated with Sector Delaware Bay's Operational Planning and Force Readiness Staff prior to 1 May.
  - .03 Notification should be made to the COTP of any problems noted that would prevent or limit preparedness for the hurricane, and identify potential problems or conditions, which cannot be mitigated within 72 hours.

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.2. Coast Guard:

- .01 Provide updates to this plan to all holders.
- .02 The marine community will be notified of the beginning of hurricane season by Marine Safety Information Bulletin (MSIB) and the Maritime Exchange's web site. When possible, any changes will be forwarded at the same time.
- .03 Ensure all telephone numbers listed within this plan are current and validated by 30 April each year.
- .04 COTP will request a preparedness meeting of the Mariners Advisory Committee (MAC) to review procedures and storm-specific problems as appropriate. This may be conducted using a conference call if appropriate.

.3. Vessels:

- .01 All vessels should review their individual storm and heavy weather plans, training, and material condition.
- .02 The owner, operator, or representative of vessels in lay-up status are to ensure that vessels under their control are prepared to withstand hurricane conditions.
- .03 Review requirements in Section 1201 Storm Preparation Checklist for Vessels.

.4. Waterfront Facilities:

- .01 Waterfront facility owners and operators will take prompt effective action to ensure the safety of vessels at their facility and the safety of the facility, its personnel, and the environment.
- .02 Include emergency procedures for hurricane conditions in the facility Operations Manual.
- .03 Ensure that vessels in lay-up status under your control are prepared for the arrival of hurricane conditions.

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.04 Review requirements in Section 1202 Storm Preparation Checklist for Facilities.

.5. Ship's Agents:

.01 Ship's agents are responsible for ensuring that the vessels under contract are provided with the contents of this plan and made aware of their responsibilities regarding safety of the port in the event of a hurricane. Agents shall generally act as liaison between the Coast Guard and the vessels.

.02 Ensure copy of the Storm Preparation Checklist for Vessels has been given to each vessel prior to arrival.

**405. Maritime Hurricane Condition WHISKEY (72-Hour):**

.1. General: (Port Community)

.01 Monitor the approach of the hurricane as broadcast by the National Weather Service and Coast Guard Broadcast Notice to Mariners (BNTM).

.02 Notification should be made to the COTP of any problems noted that would prevent or limit preparedness for the hurricane, and identify potential problems or conditions, which cannot be corrected or mitigated within 48 hours.

.03 Due to the limited availability of resources as the storm approaches, labor should be scheduled and/or hired accordingly.

.2. Coast Guard: The COTP will establish contact and coordinate activities as necessary with other federal, state, and local agencies to ensure the timely dissemination of information.

.01 The Coast Guard will monitor the position of the approaching storm as often as National Weather Service updates are available. This will ensure that all actions are taken in a timely manner and prevent response actions from being overlooked.

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- .02 The Coast Guard will ensure that appropriate broadcasts and notifications are conducted, advising the port community of the changing conditions of readiness.
  - .03 The COTP will coordinate harbor patrols throughout the port identifying potential hazardous situations such as derelict vessels, excessive unsheltered storage missile hazards and other items or situations which could not be mitigated within 48 hours.
  - .04 The COTP will coordinate Coast Guard preparations with Sector Field Office Atlantic City for all mutual concerns within the Delaware Bay and Atlantic coastal areas.
- .3. Vessels:
- .01 The vessel's master will take prompt effective action to ensure the safety of his or her ship and crew. If possible the master will avoid the hurricane by putting to sea. Should circumstances dictate staying in port, the master will follow other relevant plans and use his best judgment to weather the storm, and shall monitor BTNMs for additional instructions. The master should consider that availability of bunkers and stores may be interrupted after storm passage.
  - .02 Vessels shall follow the appropriate Hurricane Condition WHISKEY requirements in Section 1201 Storm Preparation Checklist for Vessels
- .4. Facilities:
- .01 The owner and operator of Waterfront Facilities should make initial inspection of piers, docks, roadways, and vessels to identify unsafe conditions such as excessive unsheltered storage, missile hazards, unsecured storage tanks or any other potential problems or conditions which cannot be mitigated within 48 hours.
  - .02 Facilities shall follow the appropriate Hurricane Condition WHISKEY requirements in Section 1202 Storm Preparation Checklist for Facilities.

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- .5. Agents:
- .01 Vessel agents should anticipate and notify the COTP Sector Delaware Bay which vessels will be in port or bound for the COTP zone within the following 48 hours.
  - .02 Vessel agents should notify all vessels that will complete cargo operations within 36 hours that they should depart port for Open Ocean immediately upon completion if possible.
  - .03 Vessel agents should ensure that all vessels in lay-up status under their control are prepared for arrival of hurricane conditions.
  - .04 Vessel agents should advise vessels anchored in or bound for anchorages above Big Stone that they will not be allowed to ride out the storm at those anchorage areas. Agents should arrange appropriate resources to shift vessels from upriver anchorages upon setting of Condition YANKEE.
  - .05 Vessel agents should review expected vessel arrivals and departures to identify any potential need for assistance or impairment of port operations.
  - .06 Agents should review port emergency procedures and contacts with vessel masters.
- .6. Pilots: Pilots should expect requests for arrangements to shift vessels from upriver anchorages to piers, C&D Canal, Big Stone or Breakwater Anchorages, or to sea upon setting Condition YANKEE.

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**406. Maritime Hurricane Condition X-RAY (48-Hour):**

- .1. General: (Port Community)
  - .01 Maintain close contact with the COTP office to advise of any unusual or dangerous situations. Notification should be made to the COTP of any problems noted that will prevent or limit preparedness for the hurricane and identify potential problems or conditions which cannot be mitigated within 24 hours.
  - .02 Complete condition X-RAY preparations. Review and prepare for condition YANKEE and ZULU. Contact COTP Sector Delaware Bay with specific questions.
- .2. Coast Guard: Continue monitoring port conditions and identifying potential safety problems to the responsible party.
- .3. Vessels:
  - .01 Vessels shall follow the appropriate Hurricane Condition X-RAY requirements in Section 1201 Storm Preparation Checklist for Vessels.
  - .02 All fishing vessels and small vessels in coastal areas should immediately make for the nearest port of safe refuge. All dredges should cease operations and complete final heavy weather preparations.
- .4. Facilities: Facilities shall follow the appropriate Hurricane Condition X-RAY requirements in Section 1202 Storm Preparation Checklist for Facilities.
- .5. Pilots: Pilots are requested to inform the COTP office of any vessels requesting to anchor within the COTP Sector Delaware Bay zone.

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**407. Maritime Hurricane Condition YANKEE (24-Hour)**

- .1. General: (Port Community)
  - .01 Anticipate the designated waters of the Captain of the Port Philadelphia Zone will be closed when Hurricane Condition ZULU is set.
  - .02 Curtail regular operations as applicable; anticipate cessation of cargo handling operations upon setting Hurricane Condition ZULU.
  - .03 Maintain close contact with the COTP office to advise of any unusual or dangerous situations. Notification should be made to the COTP of any problems noted that will prevent or limit preparedness for the hurricane, and identify potential problems or conditions which cannot be mitigated within 12 hours.
- .2. Coast Guard:
  - .01 COTP representatives will report to designated Federal, state, county and/or local emergency operations centers as appropriate.
  - .02 Commence pre-positioning of personnel, vehicles, boats, aircraft, communications equipment and supplies for post hurricane recovery operations.
- .3. Vessels:
  - .01 Masters of vessels must ensure adequate final preparations are made in anticipation of approaching hurricane conditions. **THIS CONTINGENCY PLAN DOES NOT LIMIT THE MASTER'S RESPONSIBILITY TO ENSURE THE SAFETY OF THE VESSEL.**
  - .02 Vessels shall follow the appropriate Hurricane Condition YANKEE requirements in Section 1201 Storm Preparation Checklist for Vessels.
- .4. Facilities:
  - .01 The owner and operator should complete securing or removing any hazardous materials and reduce any potential missile hazards on piers, docks, roadways, etc.

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.02 Facilities shall follow the appropriate Hurricane Condition YANKEE requirements in Section 1202 Storm Preparation Checklist for Facilities.

.5. Agents: Agents should ensure timely and adequate preparations are being conducted by the vessel master and crew.

.6. Pilots: Pilots should advise the COTP Sector Delaware Bay when pilot services are expected to be suspended.

**408. Maritime Hurricane Condition ZULU (12-Hour):**

.1. General: (Port Community)

.01 **THE DESIGNATED WATERS OF THE COTP SECTOR DELAWARE BAY ZONE ARE CLOSED.** Except for vessels seeking safe harbor or refuge, vessel movements without specific authorization from the COTP Sector Delaware Bay are prohibited. All vessels and facilities are to cease cargo operations and drain all cargo lines (as applicable). All missile hazards shall be properly secured. All cargo cranes are to be secured and made fast.

.02 Maintain close contact with the COTP office to advise of any unusual or dangerous situations. Notification should be made to the COTP of any problems noted that will prevent or limit preparedness for the hurricane, and identify potential problems or conditions which cannot be mitigated within 6 hours.

.2. Coast Guard: The COTP will activate an alternate Operations Center (if necessary), and will provide the port community with emergency contact information in the event that communications with the Coast Guard base are unavailable. COTP Sector Delaware Bay will establish an incident specific communications schedule based on D5/LANT and unit communications plans and will establish a communications schedule with emergency management agencies and other units.

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.3. Vessels:

- .01 Vessel masters and persons in charge should make final inspections to ensure the vessel is secure and prepared for the approaching hurricane conditions. All vessels are to set a navigation watch. All vessels are to have engines on immediate standby. All vessels in the Intracoastal Waterway or entering inlets are to contact the nearest Coast Guard unit with their status and seek nearest immediate safe mooring.
- .02 Vessels shall follow the appropriate Hurricane Condition ZULU requirements in Section 1201 Storm Preparation Checklist for Vessels.
- .03 Make final pre-storm status report to COTP Sector Delaware Bay.

.4. Facilities:

- .01 The owner and operator should make final inspection to ensure the facility is secure and prepared for the approaching hurricane conditions, including the adequate moorings of vessels remaining at the facility.
- .02 Facilities shall follow the appropriate Hurricane Condition ZULU requirements in Section 1202 Storm Preparation Checklist for Facilities.
- .03 Make final pre-storm status report to COTP Sector Delaware Bay.

.5. Agents:

- .01 Agents should notify vessels enroute Philadelphia that hurricane force winds are expected to reach the COTP Sector Delaware Bay zone within 12 hours, and should encourage vessels to remain at sea.
- .02 Agents should notify the COTP of any vessels requesting to enter port after Hurricane Condition ZULU has been set to obtain permission.

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- .6. Pilots: When notified by any vessels enroute to Philadelphia during this condition should be informed that hurricane force winds are expected to reach the COTP Sector Delaware Bay zone within 12 hours, and should encourage vessels to remain at sea.
409. **Post Hurricane Assessment Phase**: After the storm has immediately passed, it may be necessary for the COTP to maintain restrictions in the designated waters of the COTP Sector Delaware Bay Zone until an assessment can be conducted. Previous storms have shown that the waterway is not necessarily safe for navigation immediately after a hurricane force storm. Specific problems can include: large hazards to navigation, released hazardous materials and discharged oil products, reduced emergency response and search & rescue capabilities. This phase will be enacted as soon as the storm has passed, if necessary. If deemed not necessary, the status will revert to Seasonal Alert. Change in status will be immediately communicated by Marine Safety Information Bulletin and Broadcast Notice to Mariners (voice) via Ch. 16 and 22A VHF-FM. The assessment procedures under part 410 apply.
410. **Post Hurricane Recovery Operations**:
- .1. General: (Port Community)
- .01 Conduct a damage assessment survey as soon as possible after the passing of the storm. Notify the COTP Sector Delaware Bay of any persons in distress, major damage, or any other hazardous situations as soon as possible. **NEGATIVE REPORTS ARE REQUIRED** (no problems, etc.).
- .02 ***Keep in mind that access, communications, and utilities are often interrupted for considerable periods of time following a significant storm.*** Ensure that you comply with directions on restrictions and limitations being directed by federal, state, and local agencies, as well as utilities. Safety of personnel however is paramount. Personnel should not be placed at risk merely to gain a damage assessment. If you are unable to contact COTP Sector Delaware Bay, contact the nearest CG unit or the nearest Emergency Operations Center.

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- .03 It can be anticipated that commercial power and, consequently other utilities will be interrupted for up to 96 hours or more. The various draw and swing span bridges may experience delays or closures, which could severely hinder both marine and vehicle traffic.
- .04 Do not resume normal operations until the COTP Sector Delaware Bay authorizes it.
- .2. Coast Guard:
  - .01 All units report status to Sector Delaware Bay ASAP.
  - .02 Follow guidelines in CCGD5 OPLAN 9750-02, Appendix 21 to Annex C, dated 23 December 2002.
  - .03 Request USACE survey commercial channels as soon as possible.
  - .04 Prioritize, coordinate response and relief efforts. Priorities in order are:
    - a) Search and Rescue
    - b) Response to fires, HAZMAT, and oil incidents with potentially significant impact.
    - c) Resumption of communications, energy and relief services. Due to the strategic nature of port energy transport, the COTP will give a high priority to re-establishing the safe movement of energy transport vessels.
    - d) Resumption of transportation and commerce.
    - e) Law enforcement
    - f) Resumption of normal marine activities.
  - .05 Submit final SITREP to LANTAREA via D5.
- .3. Vessels: Render assistance as necessary or requested.

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- .4. Facilities: Assess damages to docks and moorings, containers, communications, storage tanks, lighting, and all cargo handling gear. Visually inspect and carefully pressure test oil and hazardous material pipelines to MAWP for integrity. Report the status and results of these activities to COTP Sector Delaware Bay.
  
  - .5. Agents: Contact vessels and collect status assessments. Report it to COTP Sector Delaware Bay. **Direct vessels not to move or resume operations until authorized.**
  
  - .6. Pilots: Assist COTP Sector Delaware Bay in assessing channel and aids to navigation damage, assist vessels in distress, and coordinate vessel movements.
411. Documentation of Action: RESERVED

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**SECTION 1200 - CHECKLISTS**

**1201. STORM PREPARATION CHECKLIST FOR VESSELS**

**I. HURRICANE CONDITION WHISKEY**

**72 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Open to all commercial traffic**

- (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 and security arrangements appropriate to the new mooring/berth.
- (d) COTP will establish a Safety Zone that requires:
  - (i) All self-propelled oceangoing vessels over 200 GT and all oceangoing barges and their supporting tugs to report their intention to depart or remain in port.
  - (ii) All self-propelled oceangoing vessels over 200 GT and all oceangoing barges and their supporting tugs remaining in port to complete a **REMAINING IN PORT CHECKLIST (Appendix 3)** and submit to the COTP within 24 hours for review. This checklist will allow the COTP to know what vessels are in the port. Fax this information to Marine Safety Duty Officer (MSDO) in Sector Delaware Bay's Command Center at (215) 271-4833. MSDO can be contacted via telephone at (215) 271-4807.
- (e) Vessels intending to remain at their moorings during the hurricane should obtain the permission of the owner, operator, or person-in-charge of the waterfront facility and determine the conditions the facility will require.

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**I. HURRICANE CONDITION WHISKEY (Cont'd)**

**72 HOURS BEFORE ANTICIPATED LANDFALL**

- (f) Ships intending to remain in port at anchor during the hurricane should contact the Pilots' Association of the Bay and River Delaware to obtain a hurricane anchorage assignment. The Pilots' Association will report the identity and location of vessels anchored in hurricane anchorages to the COTP. **(NOTE 1: Vessels may not remain anchored at anchorages above Big Stone upon setting of Condition Yankee. NOTE 2: Barges shall not anchor during a hurricane unless approved by the COTP.)**
  
- (g) Certain bulk oil and hazardous material facilities may insist that vessels depart their docks during this period. The Captain of the Port will permit these moves only when other alternative berthing or safe anchorage has been identified within reasonable proximity.
  
- (h) The owner, operator, or representative of a vessel in lay-up status shall ensure the vessel is adequately secured to withstand hurricane conditions.
  
- (i) All offshore lightering is to cease, and vessels are to break off and make heavy weather preparations.
  
- (j) Ship and barge masters/operators shall identify primary and secondary sources of tug assistance for use during or after storm passage.
  
- (k) Set a continuous Channel 16 VHF-FM radio watch.

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**II. HURRICANE CONDITION X-RAY**

**48 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Open to all commercial traffic**

- (a) All REMAINING IN PORT CHECKLISTS should have been submitted to the COTP for review. (COTP will individually assess vessels desiring to remain in port, issue COTP Orders as appropriate).
- (b) Vessels or Barges intending to anchor in port during the hurricane should prepare to proceed to anchorage prior to movement restrictions and closing of the designated waters of COTP Sector Delaware Bay (Condition YANKEE).

**See Appendix 1 to Section 1201 Minimum Recommended Precautionary Measures for Ships that are anchored in the port.**

**See Appendix 2 to Section 1201 Minimum Recommended Precautionary Measures for Barges that are anchored in the port.**

- (c) Vessels intending to weather the hurricane at sea should prepare to depart the port prior to movement restrictions and closing of the designated waters of the COTP Sector Delaware Bay (Condition YANKEE).
- (d) Vessels or Barges intending to remain moored at a waterfront facility during the hurricane should prepare to proceed to the facility if not already there or shift berths if needed, prior to movement restrictions and closing of the designated waters of the COTP Sector Delaware Bay (Condition YANKEE).

**See Appendix 1 to Section 1201 Minimum Recommended Precautionary Measures for Ships that are moored in the port.**

**See Appendix 2 to Section 1201 Minimum Recommended Precautionary Measures for Barges that are moored in the port.**

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- (e) All fishing vessels and small vessels in coastal areas should immediately make for the nearest safe port of refuge. All dredges should cease operations and complete final heavy weather preparations.
  
- (f) Continue to monitor Channel 16 VHF-FM radio.

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**III. HURRICANE CONDITION YANKEE**

**24 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Vessel traffic control measures in effect**

- (a) COTP will establish a Safety Zone controlling vessel movements and activities as appropriate.
- (b) Vessels should prepare to suspend cargo transfer operations as required by weather conditions or by the COTP.
- (c) COTP to review or direct, as necessary, final mooring arrangements for vessels remaining in port. Ships and barges may not be anchored above Big Stone Anchorage (BSA). Vessels anchored in Delaware Bay or River above BSA must depart anchorage immediately.
- (d) All lightering and bunkering must cease.
- (e) The Port of Salem is closed. Vessels must depart immediately.
- (f) All moored tank barges are required to have tug on standby alongside or in immediate proximity. All freight barges are required to be moored to a pier or wharf.
- (g) Masters of vessels remaining at anchorage must ensure that at least two anchors must be set.
- (h) All local tug companies should have a list of tugs available for assistance prior to and after hurricane passage.

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- (i) All Coastal Inlets are closed to departing traffic.
  
- (j) Continue to monitor Channel 16 VHF-FM radio.

**Note:** Vessel traffic may be permitted in and out of port at the discretion of the COTP upon setting of Hurricane Condition ZULU. However, masters should not count on being able to transit the port during that time period and should plan accordingly. Vessel transit to and from the Port of Baltimore through the C&D Canal will be closely coordinated with COTP Baltimore

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**IV. HURRICANE CONDITION ZULU**

**12 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Closed to all vessel traffic except for vessel movements and activities specifically authorized by the COTP**

- (a) Ensure the vessel is securely moored or anchored and prepared for hurricane conditions.
- (b) COTP will establish a Safety Zone prohibiting vessel movement and activities
- (c) Suspend cargo transfer operations as required by weather conditions or by the COTP.
- (d) Report any hazardous conditions or breakaways of vessels directly to the COTP as soon as possible.

Appendix 1 Recommended Precautionary Measures for Ships  
Appendix 2 Recommended Precautionary Measures for Barges  
Appendix 3 Storm Preparedness Planning for Oceangoing vessels and Oceangoing barges with tugs  
"REMAINING IN PORT CHECKLIST"

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**SECTION 1200 - CHECKLISTS**

**1202. STORM PREPARATION CHECKLIST FOR FACILITIES**

**I. HURRICANE CONDITION WHISKEY**

**72 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Open to all commercial traffic**

- (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 or to anchor barges must be reviewed by the COTP).**
- (b) The owner or operator should review expected vessel arrivals and departures to identify any potential need for assistance or impairment of port operations.
- (c) Determine whether vessels desiring to remain moored to the facility during the hurricane will be allowed to do so. Notify the vessel master, vessel agent, and the COTP of the facility's decision. **(NOTE: The COTP may direct the vessel or facility to take certain precautions to correct conditions which threaten the port or the environment, one of which may be to direct the vessels to proceed to sea or anchor).**
- (d) Review operational schedules to identify and reduce shipments of Cargoes of Particular Hazard, Hazardous Material, and/or Dangerous Cargoes arriving via highway or rail vehicles.
- (e) Ensure that vessels in Lay-up Status under your control are prepared for hurricane conditions.

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- (f) The owner and operator of waterfront facilities should make initial inspection of piers, docks, roadways and vessels to identify unsafe conditions such as excessive unsheltered storage, missile hazards, unsecured storage tanks or any other potential problems or conditions which cannot be mitigated within 48 hours.
  
- (g) The owner or operator should determine whether vessels moored to the facility should remain until the hurricane passes. If not, they must notify the vessel's master or agent to allow them adequate time to make preparations to shift berths or get underway and consult with the COTP.
  
- (h) The owner or operator should anticipate cessation of cargo handling operations at the setting of Condition ZULU and make appropriate arrangements.
  
- (i) The owner or operator should evaluate the extent that a 96 hour interruption of cargo operations, during and after storm passage, will interrupt strategic public safety, energy, or transportation needs. If a significant interruption is expected, it should be reported to the COTP.

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**II. HURRICANE CONDITION X-RAY**

**48 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Open to all commercial traffic**

- (a) Determine the special needs and intentions of vessels moored at the facility.
- (b) Determine whether vessels desiring to remain moored to the facility during the hurricane will be allowed to do so. Notify the vessel master, vessel agent, and the COTP of the facility's decision. **(NOTE: The COTP may direct the vessel or facility to take certain precautions to correct conditions which threaten the port or the environment, one of which may be to direct the vessels to proceed to sea or anchor).**
- (c) Facilities requiring vessels to depart their docks during this period will require permission of the COTP. Permission will be given only when other safe alternative berthing or anchorage has been identified within reasonable proximity.
- (d) The owner or operator should evaluate the extent that a 96 hour interruption of cargo operations, during and after storm passage, will interrupt strategic public safety, energy, or transportation needs. If a significant interruption is expected, it should be reported to the COTP.
- (e) Set a time for the 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 hurricane condition **ZULU**. Notify the COTP of the time established.

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**III. HURRICANE CONDITION YANKEE**

**24 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Vessel traffic control measures in effect**

- (a) Secure missile hazards, and clear nonessential equipment and loose gear from all wharves and piers.
  
- (b) Secure or move hazardous materials and dangerous cargoes to a safe location. Individual drums of hazardous materials should be palletized, and banded. When palletized drums are stowed inside they should be elevated off the floor in a well ventilated warehouse. When stowed outside, palletized drums should be sheltered from the weather as much as possible, and in no case stacked more than two high. Stacked pallets of drums should also be braced and dunnaged to prevent shifting and/or toppling. **(NOTE: Title 49 of the Code of Federal Regulations parts 171-178 should be used as a stowage and segregation guide, if the drums to be consolidated contain hazardous materials from different Hazard Classes/Divisions).** Grounded containers should be stacked no more than 3 high. Empty containers should be moved to less flood prone areas if possible.
  
- (c) Advise the COTP of any dangerous cargo which cannot be secured or moved to a safe location.
  
- (d) Prepare to secure cargo operations and drain cargo lines in advance of the COTP setting hurricane condition **ZULU**.

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**IV. HURRICANE CONDITION ZULU**

**12 HOURS BEFORE ANTICIPATED LANDFALL**

**Port Status: Closed to all vessel traffic except for vessel movements and activities specifically authorized by the COTP**

- (a) Secure all cargo operations.
- (b) Marine Transportation Related (MTR) facilities should drain all loading arms and transfer hoses of product, blank off hoses, empty and clean small discharge containment.
- (c) Inspect all pollution response equipment to ensure its safety and readiness for deployment after the passage of the hurricane.
- (d) All small craft owned by the facility that can be hauled out or trailered, should be removed from the water and secured well away from the effects of possible surge and high winds.
- (e) Secure all facility cranes against high winds and move away from any vessels remaining at the facility.
- (f) Ensure all vessels remaining at the facility are adequately moored and in compliance with COTP requirements.
- (g) Advise the COTP of any potential problems that remain at the facility.

Appendix 1 Recommended Precautionary Measures for Ships  
Appendix 2 Recommended Precautionary Measures for Barges  
**Appendix 3 Storm Preparedness Planning for Oceangoing vessels and Oceangoing barges with tugs**  
**"REMAINING IN PORT CHECKLIST"**

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*APPENDIX 1 TO SECTION 1200*

**MINIMUM RECOMMENDED PRECAUTIONARY MEASURES FOR SHIPS**

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**APPENDIX 1 TO SECTION 1200**

**MINIMUM RECOMMENDED PRECAUTIONARY MEASURES FOR SHIPS**

Applies to vessels:

<u>Moored</u>	<u>Anchored</u>	
X		1. Mooring lines doubled up with due consideration given to the effects of predicted storm surge.
X	X	2. At least one (1) pilot ladder is rigged on each side of the vessel.
X		3. Outboard anchor rigged at short stay.
X	X	4. Spare mooring lines and/or wires should be readily available on deck forward and aft.
X	X	5. All side ports, hatches, portholes, and other openings are closed and secured.
	X	6. Vessel machinery plant should be on immediate standby.
X	X	7. Bilge pumps and manifolds are ready for immediate use.
X	X	8. All fire fighting equipment is ready for immediate use.
X	X	9. Sufficient number of officers and crew on board to tend mooring lines, and/or get underway.
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. Vessel ballasted to ensure maximum safety.
X		12. A gangway, or other suitable means of accessing the vessel from the pier, is rigged.
X	X	13. A continuous radio watch should be maintained on Channel 16 VHF-FM (156.8 MHz) by a person who speaks fluent English.
	X	14. At least two (2) anchors should be set.

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*APPENDIX 2 TO SECTION 1200*

**MINIMUM RECOMMENDED PRECAUTIONARY MEASURES FOR BARGES**

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PORT HURRICANE CONTINGENCY PLAN**

**APPENDIX 2 TO SECTION 1200**

**MINIMUM RECOMMENDED PRECAUTIONARY MEASURES FOR BARGES**

Applies to vessels:

<u>Moored</u>	<u>Anchored</u>	
	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. <b>NOTE: In no way should this recommendation be understood as the COTP advocating personnel being placed in life threatening situations.</b>
X	X	4. All hatches, portholes and other opening are closed and secured.
X	X	5. Fire fighting equipment is available and ready for immediate use.
X	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.
X	X	8. Barge ballasted to ensure maximum safety.
X		9. A gangway, or other suitable means of accessing the vessel from the pier, is rigged.
X	X	10. Bilge pumps are operational.
X	X	11. At least one (1) pilot ladder is rigged on each side of the vessel.

USCG COTP Sector Delaware Bay  
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*APPENDIX 3 TO SECTION 1200*

Storm Preparedness Planning for Oceangoing Vessels  
"REMAINING IN PORT CHECKLIST"

**USCG COTP Sector Delaware Bay**  
**PORT HURRICANE CONTINGENCY PLAN**

**APPENDIX 3 TO SECTION 1200**

**Storm Preparedness Planning for Oceangoing Vessels**  
**"REMAINING IN PORT CHECKLIST"**

The person in charge of the vessel must submit in writing a mooring plan for review by the Captain of the Port (COTP).

Vessels remaining in port must have their decks clear of missile hazards, potential pollution hazards, and flammable materials. All persons in charge must ensure that hatches are secured for heavy weather. The following information must be included in the mooring plan submission.

Vessel information

1. Name, call sign, and official number of vessel.
2. Nationality of the vessel.
3. Name of the master.
4. Name, address, and phone number of the agent, charterer or operator, and owner.
5. Reason why the vessel is not leaving port.
6. Provide full vessel characteristics that would be needed to effect salvage.
7. Provide a full stowage plan and manifest to determine particular cargo and pollution hazards.
8. Provide 24 hour contact and information on qualified individuals who have been empowered in writing by the owners to make on-site decisions and authorize expenditures for any required pollution response or salvage.
9. Provide full insurance disclosure to the Captain of the Port, and if moored to a facility, to the facility.
10. Vessel particulars as applicable (length, breadth, draft, air draft, gross tonnage, hull type, horsepower, single or twin screw).
11. Number of personnel to remain on the vessel and their qualifications.
12. Amount of ballast the vessel may hold.
13. Amount of bunkers, lube oil, and diesel oil on board.
14. Estimated draft with the vessel in ballast.
15. Name of berth and location.
16. Depth of water in the vessel's berth at mean low water.
17. Availability of vessel's main propulsion.
18. 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.
19. Operational status of machinery on board (i.e., engines, generators, fire fighting pumps, bilge pumps, anchors and number of anchors, and mooring machinery, etc).
20. Any unusual conditions affecting the vessel's seaworthiness.

USCG COTP Sector Delaware Bay  
PORT HURRICANE CONTINGENCY PLAN

*APPENDIX 3 TO SECTION 1200*

Storm Preparedness Planning for Oceangoing Barges with Tugs  
"REMAINING IN PORT CHECKLIST"

**USCG COTP Sector Delaware Bay**  
**PORT HURRICANE CONTINGENCY PLAN**

**APPENDIX 3 TO SECTION 1200**

**Storm Preparedness Planning for Oceangoing Barges with Tugs**  
**"REMAINING IN PORT CHECKLIST"**

The person in charge of the barge and assist tug(s) must submit in writing a mooring plan for review by the Captain of the Port (COTP).

Tugs and barges remaining in port must have their decks clear of missile hazards, potential pollution hazards, and flammable materials. All persons in charge must ensure that hatches are secured for heavy weather. The following information must be included in the mooring plan submission.

Vessel information

1. Name, call sign, and official number of tug and barge(s).
2. Nationality of the tug and barge(s).
3. Name of the master of the tug.
4. Name, address, and phone number of the owner/operator, charterer, and/or agent.
5. Reason why the tug and barge are remaining in port.
6. Provide full barge and tug characteristics that would be needed to effect salvage.
7. Provide a full stowage plan and manifest to determine particular cargo and pollution hazards.
8. Provide 24 hour contact and information on qualified individuals who have been empowered in writing by the owners to make on-site decisions and authorize expenditures for any required pollution response or salvage.
9. Provide full insurance disclosure to the Captain of the Port, and if moored to a facility, to the facility.
10. Tug and barge(s) particulars as applicable (length, breadth, draft, air draft, gross tonnage, hull type, horsepower, single or twin screw).
11. Ballast capabilities.
12. Will the tug be tending the barge(s) while in port?
13. Number and rating of personnel to remain on tug and barge(s).
14. Amount of lube oil and diesel oil on board the tug and barge(s).
15. Name of berth and location.
16. 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.
17. Operational status of machinery on board the tug and barge(s)(i.e., engines, generators, fire fighting pumps, bilge pumps, anchors and number of anchors, and mooring machinery, etc).
18. Any unusual conditions affecting the tug's or barge(s)' seaworthiness.