Southeast Florida Area Contingency Plan (SEFL ACP)

Marine Fire Fighting and Salvage

Annex EMay 2022

Record of Changes

Change Number	Change Description	Section Number	Change Date	Name
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Table of Contents

1000 Introduction **1**
1010 Purpose and Objectives **1**
1020 Scope **1**
1030 Definitions **1**
1040 Acronyms **4**
2000 Authority, Responsibilities and Policy **4**
2010 Federal Policy **4**
2020 State Policy **5**
2030 Local Responsibility **6**
2040 Captain of the Port (COTP) Responsibility **7**
2050 Owner/Operator Responsibility **8**
2051 Vessels 8
2052 Waterfront Facilities 8
3000 Planning and Response Considerations **9**
3010 Levels of Response **9**
3020 High Risk Areas and Cargoes **10**
3030 Minimum Information Required **12**
3040 Initial Response Coordination **13**
3041 Vessel Response Plan (VRP) 14
3050 Access for Firefighting **14**
3060 Incident-Specific Considerations **15**
3061 Port Entry/ Anchorage Considerations 15
3062 Movement of Burning Ship Considerations 16
3063 Vessel Fighting at the Pier Considerations 17
3064 Firefighting aboard a Military Vessel 17
3065 Firefighting at a Waterside Facility 18
3066 Firefighting at a Marina 18
3067 Environmental Considerations During Firefighting Responses 18
3070 Dewatering **19**
3080 Delays in Resource Arrival **19**
3090 Assist Tugs **19**
3100 Fire Boats **19**
3110 Communications **20**
4000 Marine Fire Fighting Response **20**
4010 Marine Firefighting Guidance **20**
4020 Basic Priorities of Firefighting **22**
4030 Response Sequence **23**
4040 Notifications and Dispatch **23**

4050 Command Posts and Jurisdictional Command **24**
4060 Unified Command **24**
4061 Coordination of Special Resources 25
4062 Resolution of Disputes 25
4070 Termination of Response Activities **25**
4071 Post-Incident Resolution Issues 25
4072 Financial Documentation and Cost Reimbursement 26
5000 Plan Administration **26**
5010 Exercises **26**
5020 Training **26**
5030 Plan Review **27**
5040 Memorandums of Agreement/ Memorandums of Understanding **27**
6000 Local and Regional Firefighting Organizations and Capabilities **27**
7000 Marine Firefighting Quick Response Sheet (QRS) **31**
8000 Recommended Response Organization **35**
9000 Recommended Marine Firefighting Anchorages **36**

1000 Introduction

This section of the Area Contingency Plan (ACP) outlines the USCG responsibilities and provides response guidelines for a marine fire. A marine fire emergency is defined as any emergency that poses a threat to the port's facilities or vessels through fire or the potential for fire.
A marine fire can occur through a variety of catalysts including, but not limited to, collision, hot work, explosion, arson, terrorism, and carelessness. It is understood that numerous other incidents may occur within the port, but it is felt that they are addressed adequately in other existing plans.

1010 Purpose and Objectives

Major marine firefighting incidents will likely require the coordinated efforts of federal, state, and local resources to carry out the appropriate level of response required. The purpose of this plan is to provide guidance to the Captain of the Port (COTP) and jurisdictional fire agencies concerning fighting fires on vessels to ensure coordinated response to marine fires occurring throughout the Southeast Florida region.

This regional contingency plan has the following major objectives:

(1) To ensure the safety of first responders, protect lives, property, and the environment within the ports and communities of Southeast Florida;

(2) Identify jurisdiction and clarify lines of authority and support during a response;

(3) Maintain Marine Transportation System (MTS) and marine commerce;

(4) Protection of the environment;

(5) Preserve property; and

(6) Secure a relationship among responsible federal, state, and local jurisdictions and commercial facilities so that resources may be employed to affect a swift, well-coordinated response to vessel and waterfront fire emergencies.

1020 Scope

The Marine Firefighting Plan is prepared and maintained by USCG Sector Miami. The data recorded in this Plan reflects input from the Marine Firefighting Subcommittee of the Southeast Florida Area Committee and encompasses all navigable waters, adjacent facilities and areas within the COTP Miami Zone (33 CFR 3.35-10).

1030 Definitions

Captain of the Port (COTP): The Coast Guard officer designated by
Commandant, USCG, to exercise federal responsibility for the safety and security of ports and waterways in a specific geographic area. For purposes of this Plan, COTP means COTP Sector Miami.

Dangerous Cargo Manifest: The Dangerous Cargo Manifest (DCM) is a listing of all hazardous material cargo on a vessel and contains a great deal of information of interest to emergency response teams. Vessel information includes name, call sign, flag, port of loading/discharge, and date. Cargo information includes proper shipping name, gross weight of cargo, hazard class, types of package, storage locations, and emergency response telephone number. Only hazardous materials subject to 49 CFR or the International Maritime Dangerous Goods (IMDG) code may be listed on the DCM.

Emergency Operations Center: County and state-run facilities with extensive inter-agency communications and coordination capabilities. It will be activated during significant emergencies such as a Level II fire as defined in this Plan.

Fire Control Plan: A copy of this plan is prominently displayed in a weather tight enclosure, located outside the deckhouse (usually near the brow) for the assistance of shoreside firefighting personnel. It contains a set of general arrangement plans showing, for each deck, the fire control stations, fire-resistant and fire-retardant bulkheads. It also contains particulars of the fire detection, manual alarm, fire extinguishing systems, fire doors, means of access/egress to different compartments, and ventilating systems including locations of dampers and fan controls.

Hazardous Materials: These are materials which, when commercially transported, are designated by the US Dept of Transportation (DOT) as presenting an unacceptable risk to health, safety, and property. These materials are carried by vessel in accordance with US DOT or USCG regulations. Regulations applicable to the transportation of hazardous materials by vessel type include:

- Title 49 CFR, Subchapter C (Packaged Materials)
- Title 46 CFR, Subchapter D (Tank Vessels)
- Title 46 CFR Subchapter O (Certain Bulk Dangerous Cargoes)

International Shore Connection: This device is used to connect the water system piping of the vessel with the water supply on the shore. International Code requires that the ship have a connection with the ship's fire system threads on one end and the international bolted flange on the other end. National Fire Code (NFPA 1405) requires the shoreside fire department to have a connection with the shoreside fire department's threads on one end and the international bolted flange on the other end.

Marine Chemist: A technician certified through the National Fire Protection Association (NFPA) to determine if enclosed spaces are Safe for Workers and Hotwork or other operational restrictions for overhaul after the fire has been extinguished. The Marine Chemist should also be consulted for any fires involving hazardous materials.

Marine Fire Fighting Work Group: A functional subcommittee of the Southeast Florida Area Committee, which examines local policy issues and concerns regarding firefighting in the COTP area. This group will be comprised of USCG and local/state firefighting agencies to enhance inter-agency coordination.

National Fire Protection Association (NFPA): An international non-profit organization of technical experts established in 1896 to reduce the worldwide burden of fire hazards by providing codes and standards, research and education. Many of these codes and standards have been incorporated by reference into federal and local regulations. NFPA 1405 – Guide for Land-based Fire Fighters Who Respond to Marine Vessel Fires is referenced in this plan as the accepted practices to be followed when responding to marine fires in COTP Miami zone.

Navigation and Inspection Circular (NVIC) 2-10: Guidance for Implementation and Enforcement of the Salvage and Marine Firefighting Regulations for Vessel Response Plans (VRP) as required by See 33 CFR 155 Subpart I.

Ports and Waterways Safety Control Act (PWCS) of 1972: Mandates an increased supervision of port operations to prevent damages to structures in, on, or adjacent to the navigable waters of the U.S., and to reduce the possibility of vessel cargo loss, danger to life, property, and the marine environment.

Regional Response Team (RRT): Each RRT maintains a Regional Contingency Plan (RCP) and has state, as well as federal government, representation. EPA and the Coast Guard co-chair the RRTs. RRTs are planning, policy and coordinating bodies and do not respond directly to the scene. The RRT provides assistance as requested by the On-Scene Coordinator during an incident. South Florida resides in Regional Response Team IV zone. (See also http://www.rrt4.nrt.org/)

Safety Data Sheet (SDS): Formally known as Material safety Data Sheets (MSDS) under the old OSHA Standard, the SDS is a designed to communicate complete information about a chemical or mixture and how to mitigate any issues with handling or storage. The SDS is comprised of sixteen sections detailing information as to the fire problems, health hazards, toxicity, and reactivity of the chemical or product for which the SDS was written.

Safety Zone: A safety zone is a water area or a water/shoreside area to which, for safety or environmental protection purposes, access is limited to authorized persons, vehicles or vessels. The safety zone is established by the COTP to protect vessels, structures, and shore areas. The safety zone can be fixed or mobile around a moving vessel. The COTP may direct who and what may operate within the safety zone.

Salvage Company Representative: A person or company contracted to either assist in the firefighting effort or stabilize/recover the vessel following the fire for final disposition. The salvage representative may be contracted by the owner/operator of a vessel or a regulatory agency (local, state, federal) when the owner/operator has not responded in a timely manner. The agency decision to contract a salvor should be the function of a unified command.

Security Zone: Security zones are designated areas of land, water, or land and water established for such time as is necessary to prevent damage or injury to any vessel or waterfront facility to safeguard ports, harbors, territories, or water of the United States, or to secure the observance of rights and obligations of the United States. The security zone is established by the COTP or CG District Commander. The designation of a security zone may only be made for areas within the territorial limits of the United States.

Strike Team: A Coast Guard component comprised of highly trained professional cadre who maintain and deploy with specialized equipment and expertise to support Federal responses to pollution and salvage incidents. South Florida resides in the Gulf Strike Team zone home ported in Mobile, AL.

Vessel response Plan (VRP): Regulated vessels are required to maintain a shipboard spill mitigation plan also referred to as a Vessel Response Plan.
See also NVIC 02-10 above.

1040 Acronyms

BNTM	Broadcast Notice to Mariners
COTP	(USCG) Captain of the Port
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	(US) Code of Federal Regulations
CWP	Clean Water Act
DCM	Dangerous Cargo Manifest
EOC	(County) Emergency Operations Center
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
GST	(USCG) Gulf Strike Team
IC	Incident Commander
IMDGC	International Maritime Dangerous Goods Code
MTR	Marine Transportation Related (facility)
MTS	Marine Transportation System
NFPA	National Fire Protection Act
NRC	National Response Center
NTSB	National Transportation Safety Board
NVIC	Navigation and Vessel Inspection Circular
OPA-90	Oil Pollution Act of 1990
OSLTF	Oil Spill Liability Trust Fund
PWSA	Ports and Waterways Safety Act
QI	Qualified Individual
RRT	Regional Response Team
SDS	Safety Data Sheet
SAR	Search and Rescue
UC	Unified Command
USC	United States Code
VRP	Vessel Response Plan

2000 Authority, Responsibilities and Policy

2010 Federal Policy

This section is written in accordance with the U.S. Coast Guard Marine Environmental

Response (MER) and Preparedness Manual, COMDTINST M16000.14A, which requires Captains of the Port (COTP) to develop current and effective contingency plans, supported by the port community, providing adequate response by the available federal, state, municipal and commercial resources to fires and other port emergencies.

The Federal Fire Prevention and Control Act of 1974 (PL 93-498), declares that firefighting is and should remain a state and local function and in as such the fire department within whose jurisdiction the vessel or facility is located is the responsible fire suppression agency and is in charge of all firefighting efforts. Although the Coast Guard clearly has an interest in fires involving vessels or waterfront facilities, jurisdictional authorities are principally responsible for maintaining the necessary firefighting capabilities within U.S. ports and harbors and up to 3 NM from the coastline boundary as directed by the Governor or applicable County emergency operations center (EOC).

The Coast Guard, under the provisions of the Port and Waterways Safety Act (PWSA) (33 USC 1221), has broad authority to prevent damage to, or the destruction/loss of any vessel, bridge or any other structure on or in the navigable waters of the United States. This responsibility extends not only to ships and their crew; but also personnel responsible for structures in, on, or immediately adjacent to the navigable waters of the United States, or the resources within these waters.

Under this statute, the COTP has the authority to:

- Direct the anchoring, mooring, or movement of a vessel;
- Specify times of vessel entry, movement, or departures to, from, or through ports, harbors or other waters;
- Restrict vessel operations in hazardous area or, under hazardous conditions to vessels which have particular operating characteristics, or capabilities; or
- Direct the handling, loading, discharge, storage and movement, including emergency removal, control and disposition of explosives or other dangerous cargo or substances, on any bridge or other structure on or in the navigable waters of the United States or structure immediately adjacent to those waters.

The Oil Pollution Act of 1990 (OPA 90) mandates that owners and operators of vessels and Marine Transportation Related (MTR) facilities must identify response resources with firefighting capability. 33 CFR Part 154 requires MTR facilities that do not have adequate firefighting resources located at the facility or which cannot rely on sufficient local firefighting capability must identify and ensure the availability of adequate resources within 24 hours. 33 CFR Part 155 requires that vessel owners and operators must identify commercial resources capable of deploying to the port within 24 hours.

2020 State Policy

Florida State Statute 252 (Emergency Management) gives the State Director of Emergency Management (FLDEM) authority to provide support from available personnel, equipment, and other resources of state agencies and political subdivisions of the state that may be necessary to reinforce emergency management agencies in areas stricken by the emergency. This support is

normally provided through the County emergency operations center (EOC) as a coordinating body, however direct assignment to the jurisdictional Fire Chief may also occur if urgency demands.

2030 Local Responsibility

The owner/operator of a waterfront facility and the master of a vessel moored at a facility have a vested interest in the protection of the crew, facility, vessel and cargo. In the event of a fire, prompt notification must be given to jurisdictional response agencies. The vessel/facility should contact the jurisdictional fire department by calling 911 and/or hailing the United States Coast Guard via VHF CH-16 if unable to call 911 due to poor reception.

It is essential that both County emergency management officials and COTP be notified immediately of any marine fire. Notifications should be conducted in accordance with section 4040 of this annex for rapid, efficient dissemination of information. Local standard operating procedures may dictate additional notifications.

The fire department within whose jurisdiction the vessel/facility lies or is moored is the responsible fire suppression agency and is in charge of all firefighting efforts. The fire department which has jurisdiction will:

- Act as Incident Commander;
- Establish a command post when acting as IC;
- Request necessary personnel and equipment including fire boats, scene support, and appropriate medical aid;
- Determine the need for, and request mutual aid;
- Notify the COTP. Make all requests for Coast Guard/federal personnel, equipment, and waterside security through the COTP;
- Establish liaison with police departments for landside traffic and crowd control, scene security, and evacuation;
- Provide portable communications equipment or designate a commonly used frequency to response personnel from outside agencies to establish an interagency communications network.

In order to fulfill its obligation, which cannot be delegated, the jurisdictional fire department may request mutual aid assistance from neighboring fire departments and/or support for other agencies either directly or through its respective County EOC (ex: statewide mutual assistance agreement). In port areas where a vessel is underway or at anchor and near the boundary between adjacent counties or cities, such that the exact location of the vessel is not easily determined, the fire department closest to the site shall respond in accordance with the state-wide mutual aid agreement[1] until a position can be fixed by the Coast Guard, pilot, or master. If another department has jurisdiction, a transition process will occur and the relieved fire department will then provide support as requested.

[1] The State of Florida state-wide Mutual Aid Agreement is authority for signatory local governments to request and receive reciprocal emergency aid and assistance in emergencies too extensive to deal with unassisted and to ensure the timely reimbursement of costs incurred by the assisting local government.

2040 Captain of the Port (COTP) Responsibility

Coast Guard Policy on Firefighting – While the Ports and Waterways Safety Act (33 USC 1221) empowers the COTP with broad authority to protect the vessels, facilities, and critical marine infrastructure from damage caused by marine fires in or along the navigable waters of the United States, this authority does not preempt the jurisdictional Fire Chief's responsibility and authority for firefighting. Under this policy, the COTP Sector Miami works with port authorities and local government within their area of jurisdiction to maintain current and effective contingency plans to support the port community, including its fire departments, to ensure coordination of federal, state, municipal and commercial resources that respond to fires and other incidents. This policy is consistent with the Federal Fire Prevention and Control Act of 1974 (PL 93498) which states that firefighting is and should remain a state and local function.

COTP Sector Miami will:

- Render assistance and support as available commensurate with its level of training and adequacy of equipment;

- Work with port authorities and local governments within its jurisdiction to maintain a current and effective marine firefighting plan supported by the port community fire departments to ensure coordination of responding entities to marine fires and other incidents; and

- Incorporate firefighting contingency planning in each port's response plan in accordance with this chapter.

The Coast Guard is designated as the primary search and rescue (SAR) agency in the maritime region. First priority must remain the saving of those from peril at sea and this will be undertaken without delay while firefighting resources are being notified and requested to respond.
During a major fire aboard a vessel or waterfront facility, the COTP is responsible for:

- Assume Incident Command for a burning vessel underway or at anchor when:
  - The fire department with jurisdiction is unable to respond.
  - No fire department has jurisdiction.
  - The vessel owner/operator (responsible party) does not take appropriate action as required by their approved Vessel Response Plan (VRP).

- Assume the role of IC if the firefighting response is inadequate or nonexistent
- Participate in the Unified Command when multiple agencies are able to respond;
- Evaluate the necessity to re-locate moored and anchored vessels;
- Assume operational control of all Coast Guard forces on-scene;
- Establish safety or security zones as necessary;
- Provide information on involved waterfront facilities;
- Provide information on the location of hazardous materials on the vessel or at the facility, if available;
- Provide technical data on ship's construction, stability and marine firefighting capabilities;
- Respond to oil or hazardous material discharges;

- Obtain tugs to assist in relocating moored or anchored vessels;
- Alert owners/operators of terminals or vessels at risk;
- Liaise with port administrators to manage the shipping queue (if affected).

The local community cannot rely on Coast Guard assets as the primary firefighting resource. The COTP will convene a Unified Command to constantly monitor all activities involved in responding to the marine fire event, support the jurisdictional Fire Chief as forward incident commander and develop an integrated response plan. Senior representatives from assisting departments/agencies should comprise the Unified Command for consultation to determine options and methods to conduct a coordinated response. The County emergency operations center (EOC) provides an excellent central location for joint agency responses.

If additional resources are needed, they could be requested through the applicable County EOC (statewide mutual assistance agreement) or District Seven Command Center. For SAR operations, the largest CG vessel on scene, or as directed by COTP, will assume On-Scene Commander and will act as the command and control platform. Upon the conclusion of rescue operations, an assessment will be made by the Unified Command as to the continued need for all SAR units on scene. The operations will then shift to firefighting, salvage, and support of the safety zone (if established). The Unified Command will then prioritize those and other needed functions as needed with the designated Fire Chief responsible for all firefighting functions. If unassigned by the Unified Command, the COTP will act as the liaison between the Coast Guard, other response organizations and the media

2050 Owner/Operator Responsibility

2051 Vessels

This plan is not intended to relieve the vessel owner/operator (Master) or restrict their fundamental responsibility for safety or security of their vessel. The Master provides a vital role to the incident commander in vessel orientation, on-board cargo and stores, crew accountability and other vital information needed to safely extinguish the fire. It must be recognized, however, that the jurisdictional Fire Chief and/or designee is the most experienced in the art of firefighting and will be designated overall incident commander of the fire response.

The Master, officers, and crew shall assist in the firefighting effort with the Master being the liaison between the Incident Commander (IC) and the vessel crew. The Master should provide the IC with crew members to act as guides, and shall control the actions of his crew. The Master shall not normally countermand any orders given by the jurisdictional fire fighters in the performance of their duties unless that action taken or planned clearly endangers the safety of the vessel or crew. In the absence of the Master, the senior deck officer will act for the Master.

2052 Waterfront Facilities

Ultimate responsibility for the facility rests with the Terminal Manager. The Manager is not relieved of his duties, and as such must assist responding firefighting organizations in every way. The manager can provide detailed information on layout, location of hazardous materials, and may provide additional personnel to assist fire fighters.

Most waterfront facilities rely on jurisdictional/port fire departments for fire protection and suppression response. Therefore, in the event of a marine fire, facility owners/operators are responsible for ensuring safety of facility personnel as well as providing the IC with information regarding the facility's layout and dangerous materials.

3000 Planning and Response Considerations

3010 Levels of Response

The Not all marine disasters require the full response set forth within this plan. The following parameters may be used as a guide in determining the scale and size of response organization required given the prevailing emergency conditions:

Level I Response – Local command structure – A marine casualty involving a vessel or facility that does not pose a major threat to the port. Examples include pleasure craft, small vessels in boatyards, houseboats, etc. This level of disaster is normally managed by one jurisdictional fire department with minimal additional state and/or federal waterside support.

Sector Miami shall be notified immediately in accordance with section 4040 of this annex and will send a pollution response representative to the scene who will provide direct liaison to the COTP.

Section 8000 of this annex depicts a Level I Response Organization for planning purposes.

Level II Response – Unified Command structure – A marine casualty on a vessel or facility that has the potential to be a significant risk to the port or life. Examples include small freight vessels in Miami River, container fires aboard container ships, cruise ship fires, tug fires, any ship/barge fires, ships directed to anchorage, etc. This level of disaster may involve two or more fire departments with mutual aid, commercial firefighting capabilities, and direct state and/or federal waterside support requiring the coordination of County EOC and dispatch centers.

In the event of a major shipboard or facility fire, the COTP will request the designation of an IC. The jurisdictional Fire Chief and/or designee serves as the IC until it is deemed necessary to establish a UC. The COTP maintains the responsibility for the safety of the waterway and adjacent area.

A unified command post will be established by the jurisdictional fire department and notifications coordinated through the County EOCs and/or Sector Miami Command Center.

Sector Miami will dispatch an incident management team of appropriate size and organizational qualifications who will represent the COTP in the unified command to coordinate any support and resources outside the existing mutual aid agreements. Examples include stability calculations, obtaining salvage consultation, networking with port officials to move the affected or adjoining vessels, etc.

Responses to complex marine fire involving multiple agencies should organize in accordance with the USCG Incident Management Handbook (IMH) Chapter 21. The members of the UC must jointly determine objectives, strategy, and priorities.

Section 8000 of this annex depicts the minimum staffing of a Level II Response Organization for planning purposes.

3020 High Risk Areas and Cargoes

Passenger Vessels: Port Miami and Port Everglades are the largest cruise ship ports in the world and home to the largest cruise ships. Cruise ships arrive throughout the year with the peak of the season starting in November and lasting through April. The Port of Palm Beach caters to the "day-cruise" industry with several arrivals/departures daily and short cruise service to the Bahamas. These vessels are constructed and crewed with prescribed firefighting capabilities and may request firefighting support if a fire grows in severity.

In addition, numerous excursion vessels of various sizes and capacities transit throughout interior waterways; including larger vessels capable of carriage of 100+ passengers. These vessels have varying firefighting capability and are likely to require fire suppression support while evacuating their passengers.

The Fisher Island Ferry in Miami features five passenger ferries that operate continuously as the only transportation to/from the community of Fisher Island: Pelican (120 ft.), Flamingo (120 ft.), Eagle (120), Heron (120 ft.), Eagle 2 (152 ft.), Pelican 2 (152 ft.), and Osprey (152 ft.). Each ferry features fixed CO_2 system installed in the engine room, fire pump (140+ GPM), two fixed firefighting stations, portable fire extinguishers, and trained crew with specific assignments (Vessel Fire Bill).

Container Ships – Port Miami/Miami River, Port Everglades, and Port Everglades receive container ships which carry a myriad of packaged goods, finished products, food, and scrap. A fire could start from the cargo within or mechanical failure such as a refrigerator unit (packaged food/fruit cargo).

A fire aboard these ships could occur in transit and quickly overwhelm the crew's ability to suppress. Past workshops with the Marine Firefighting Workgroup have determined that these scenarios will be typed as a Level II response. The ship will be directed to the nearest anchorage and a Unified Command will be organized incorporating commercial firefighting resources. See Annex 4 to this Plan.

Bunkering: Vessels of all types take on fuel bunkers in the ports. Bunkers are usually received from a barge alongside the vessel while it is tied up to a facility. Vessels also regularly bunker via tank truck in Fort Pierce and Miami River.

In 2022/2023, newly built cruise ships will feature liquefied natural gas (LNG) as an alternative fuel. LNG bunkering operations will occur within Port Miami and Port Everglades while ships are moored in the port and thus may increase risk for a potential fire. Additional safety and security protocols will be enacted during these bunkering operations.

Barges: Barges are used to transport bulk fuel to vessels for bunkering and to/from shoreside storage tanks. Many tank ships arriving in Port Everglades and Port Miami are actually integrated tug/barges (ITB). Propane is transported (under pressure at ambient temperature) to Port Everglades and offloaded at Berth 11.

Military Vessels: These vessels are normally berthed at Port Everglades (midport), Port Miami (Terminal J) or Palm Beach. They may arrive alone or in a fleet involving more than one port.

Recreation Vessels: Southeast Florida has the largest concentration of recreation vessels per capita in the US. Vessels ranging from small jet skis to large yachts in excess of over 200 ft commonly traverse in the ports and waterways of the SE FL region. Most vessels are fiberglass construction and can be quickly consumed if a fire occurs on-board. Response to these fires are normally coordinated through the jurisdictional Fire Chief and at the vessel's moored location or near-offshore adrift.

The following areas within the Southeast Florida region store regulated liquids in bulk and/or have other particular risks:

Port Everglades – major storage (160+ tanks) with three primary petroleum-offloading berths, each with four loading arms, for gasoline, diesel, Aviation Fuel ("Avgas"), ethanol, and jet fuel. These berths are numbered 7, 9, and 13. (A ship using these berths is typically large enough to occupy the adjacent berth so as a shorthand berths 7/8 are referred to a berth 7, berths 9/10 as berth 9, and berths 12/13 as berth 13.

Berth 11 has loading arms for propane and is not used for other petroleum products.

Berth 5 is a secondary berth, with no loading arms, and is used primarily for black products such as 6 oil or asphalt.

Berth 8 is used for asphalt barges using hose pits

There are no separate offloading positions at either berth 10 or 12.

Berth 14 is used for diesel receipts for the FPL power plant. Typically one receipt every other year.

A fire suppression system is installed for berths 7, 9 and 13. The system consists of detection equipment, foam tanks, fixed monitors, hose reels, and a dedicated fresh water fire pump. Berths 7 and 9 contain two 1,000 gpm monitors and berth 13 has a three 750 gpm monitors. Deluge foam/water sprinklers cover each berth's containment area. Each berth also has a 1 1/2" manually operated foam reels adjacent to each foam monitor. In addition two 150# dry chemical extinguishers are present on each of the three berths plus two 30# dry chemical extinguishers per berth.

Optical infra-red detection is fitted to each of the three canopies and these alarms are remotely monitored.

Each of the tugs stationed at Port Everglades is equipped for firefighting and is outfitted with a monitor system that drafts seawater.

Port Miami – Fisher Island - Intermediate fuel oil ("No. 6 oil") and diesel fuel is stored in 12 storage tanks on the island. This facility is restocked by tank ships/ITBs and is distributed via barge to ships within the port and Miami River. The tanks are located near the waterfront. A marine fire at this location may also impact the Fisher Island ferries (see above potential impact).

Miami River – a narrow waterway extending from the south of the Port Miami 5.5 miles into the city. Marine traffic in this area includes small container and break-bulk ships, large recreation vessels and a repair/rebuild shipyard (RMK/Merrill Stevens). Many moveable bridges cross the river. A marine fire anywhere on the river could close the river to traffic and potentially impact/damage nearby bridges. Shipping companies in Miami River are major suppliers of goods to the Caribbean region and any prolonged closure of the river would result in severe negative after-effects to those economies.

Port of Palm Beach – features two storage tanks (150,000 bbls capacity) diesel fuel, four storage tanks (200,000 bbls capacity) asphalt, and six storage tanks (approx. 200,000 capacity) molasses. These tanks are located away from the waterfront.

Fort Pierce – Derecktor Shipyards focuses on maintenance and repair of custom ("mega") yachts more than 200' in length (900 ton) primarily built of steel and/or aluminum. These vessels are serviced at floating docks, dry docks, and shore side storage areas. There is no bulk storage of VOC's (diesel, gasoline, MEK, etc.) at the site.

3030 Minimum Information Required

Once the notification of a marine disaster has been received it is important that the receiving agency, whether it be a jurisdictional fire department, State/County EOC, or the Coast Guard, ascertain the necessary facts/data to correctly dispatch the needed resources contain the fire in a timely manner.

Specific critical information is needed from on-scene personnel and responding entities to ensure a successful firefighting/salvage response organization can be formed. Many of the ship design particulars may be retrieved from the vessel's Shipboard Oil Pollution Emergency Plan (SOPEP) and the Vessel Response Plan (VRP). Coordination with vessel responders as identified in the VRP is crucial to obtaining this information promptly.

A Marine Firefighting Notification Checklist is included in Appendix 2 of this plan.

At a minimum, the following information should be retrieved/known:

- <u>All Incidents</u>
    - Safety status of the crew;
    - Proximity to navigation hazard;

- On-scene weather conditions;
- Forecasted weather conditions;
- Contracted resources;
- Potential damage/breaches in hull;
- Potential for spill or plume;
- Status of ground tackle;
- Communications nature and schedule;
- Quantity/nature of cargo/fuel/ballast;
- Status of propulsion and steering.

- Grounding

  - Pre-casualty drafts;
  - Post-casualty drafts;
  - Vessel stability;
  - Tide height at grounding;
  - Location;
  - Depths of soundings;
  - Time/height of next high tide;
  - Liquid level of all tanks; □ Availability of salvage resources; □ Bottom type.

- Fire

  - Status of shipboard fire pumps;
  - Status of fixed firefighting systems;
  - Stability of vessel;
  - Status of dewatering systems;
  - Risk of further damage to vessel;
  - Status of emergency electrical systems;
  - Availability of on-board firefighting resources

3040 Initial Response Coordination

Prompt notification to the jurisdictional fire department is the first and most important step in mobilizing the necessary response resources. Initial notification of a fire will normally be received by the jurisdictional fire department through the 911 network for facility fires and vessels within the port or to the Coast Guard through channel 16 VHFFM for vessels underway within the port or off shore.

The jurisdictional fire department will assume incident command for all fires within the port and offshore out to 3 NM. Assistance to areas further offshore will be determined by distance, sea state, and prevailing weather and in agreement with the COTP.

The COTP may establish a Safety Zone around the response site at any time during the response to protect the attending responders and control traffic in and around the area as needs dictate. The COTP will also query the vessels and cargoes in the fire zone to determine any additional safety precautions such as relocating their vessels or active monitoring exposed areas/cargoes. Local shipping agents will be notified of any potential involvement or delays in arrival to or departure from their assigned moorings. When conditions warrant, a broadcast notice to mariners and/or marine safety information bulletin will be made to alert the port community and any imposed navigation restrictions.

3041 Vessel Response Plan (VRP)

The U.S. Coast Guard mandates that every vessel's Vessel Response Plan (VRP) include the name of a fire and salvage company to provide firefighting response capabilities. In the event that a jurisdictional /commercial marine firefighting response is readily available and can mitigate the damage to the vessel before the vessel's listed fire and salvage company can arrive on-scene, the available firefighting response may be used instead of the vessel's listed company. Below is the response timeframe for marine firefighting as required by 33 CFR 155.4030 (b):

Marine Firefighting			
	At Pier (hours)	CONUS: Nearshore area; inland waters; and OCONUS: < or = 12 miles from COTP city (hours)	CONUS: Offshore area; and OCONUS: < or = 50 miles from COTP city (hours)
Assessment & Planning			
(A) Remote assessment and consultation	1	1	1
(B) On-site fire assessment	2	6	12
Fire Suppression			
(A) External firefighting teams	4	8	12
(B) External vessel firefighting systems	4	12	18

Table 3041.1 Salvage and Marine Firefighting Response Timeframes

3050 Access for Firefighting

Few disasters provide optimal circumstances. A facility fire may occur in a little used warehouse space where access is difficult. A vessel fire may occur while at anchor/underway away from the resources necessary to combat it or in lower decks limiting the efficiency of firefighting water. Vessel fires will be fought at the scene and in most cases, while moored at their facility location to allow jurisdictional fire departments to combat the fire. However, vessels other than those aground or involved in a collision are generally mobile and may be maneuvered away from further

damage and brought to a location (other mooring, anchorage, etc.) to optimize the fighting of the fire.

The COTP has final authority in:

- Ordering/allowing movement of a burning ship;
- Creating accesses or penetrations into a hull of a ship or other issues involving hull integrity;
- Opening flooding boundaries or other issues involving stability

3060 Incident-Specific Considerations

The COTP approaches response to a burning ship from a "systems" perspective. The Marine Transportation System (MTS) is a term used to include the entire marine environment used by various stakeholders for transportation, recreation, and commerce. The possibility of having a ship sink in a key navigation channel or anchorage, or spreading the fire to other port assets must always be evaluated. Risk evaluations and cost-benefit analysis (public safety, environment, commerce, and property) are employed with a broad vision of the best interest to the entire port.

3061 Port Entry/ Anchorage Considerations

A situation where a request for entry into the port by a burning vessel under declaration of "force majeure" is possible (e.g., container ship with containers on fire). The authority to deny vessel entry rests solely with the COTP. Following a workshop convened in 2015 with regional firefighting agencies and industry, it was decided that any vessels arriving to port with an active fire on-board will be directed to the below applicable anchorages (See also section 9000 of this annex):

Port Everglades Anchorage: shall be the primary firefighting location for ships inbound for Port Everglades. Following the initial notification from the ship Master, the ship will be directed to the anchorage to receive assistance as needed. A safety zone of 500-1000 feet may be established around the ship to ensure safety to the public and flexible access to the ship. (See also section 9000 of this annex)

1) The Unified Command Post may be established at the Port Everglades Emergency Operations Center.

Port Miami Anchorage: shall be the primary firefighting location for ships inbound for Port Miami. Following the initial notification from the ship Master, the ship will be directed to the anchorage to receive assistance as needed. (See also section 9000 of this annex).

1) The Unified Command Post may be established in the Base Miami Beach Classroom.

Port of Palm Beach Anchorage: shall be the primary firefighting location for ships inbound for Port of Palm Beach. Following the initial notification from the ship Master, the ship will be directed to the anchorage to receive assistance as needed. (See also section 9000 of this annex)

1) The Unified Command Post may be established in the Port of Palm Beach 4th floor Operations Area.

Potential afloat command posts platforms include:

- Coast Guard cutter (e.g. CGC ETHERIDGE, etc.);
- Municipal Fireboats;
- State marine units (e.g. FWCC M/V RANDALL);
- Industry Fireboats (Resolve Marine, National Response Corp., etc.).

The COTP will request a fire department liaison be provided aboard any CG floating Incident Command Post. If a fire department establishes a floating Incident Command Post, the COTP will provide a CG liaison officer. If an industry vessel is the primary firefighting platform, both a Coast Guard and jurisdictional Fire Chief liaison should also be deployed aboard.
Once the decision to order the vessel to anchorage is made:

- Review Appendix 4 for the location within the applicable anchorage as recommended by the FL Department of Environmental Protection;
- Establish a Safety Zone of 500-1000 feet (minimum) encircling the anchorage site to ensure safety to the public and flexible access to the ship.
- Issue a Broadcast Notice to Mariners (BTNM) to Mariners
- Remain alert to potential for immediate rescue of crew members
- Remain alert to potential for vessel sinking
- Remain alert to severe weather and potential to drag anchor (corals, grounding, etc.)
- Establish environmental (sheens) monitoring for potential risk to sensitive habitats
- Establish atmospheric (burning toxics) monitoring

3062 Movement of Burning Ship Considerations

If in port, moving a burning ship to safer (or more capable) location to fight the fire may be requested/considered.

The following information will be normally gathered and considered prior to making a decision to allow/order movement of a burning ship:

- Location and extent of fire;
- Desired location/moorage;
- Status of shipboard firefighting equipment;
- Vessel condition; possibility of vessel capsizing or sinking;
- Class, amount and nature of cargo;
- Possibility of explosion and/or release of hazardous materials pollution (oil/fuel/hazmat);
- Consultation from harbor pilots and towboat operators to determine their procedures for handling emergency movement of vessels and response times;
- Hazard to crew or other resources where vessel is presently located;
- Potential for spread of fire to pier, nearby vessels/structures or other port assets along the transit;

- Maneuverability of the vessel (dead ship, etc.) and status of shipboard firefighting equipment;
- Potential impact on bridges travel under (Miami River);
- Pier access and firefighting resources available at new location;
- Present and forecast weather;
- Change in jurisdiction or government agency input; consultation with elected officials (mayor, city commissioner, etc.).

Once the decision to move the burning vessel is made, refer to the follow-on anchorage items above.

3063 Vessel Fighting at the Pier Considerations

If the vessel is moored in one of the major ports (Port Miami, etc.), immediate firefighting activities may be led by port/jurisdictional firefighting departments. Due consideration should be given to onboard firefighting procedures to help extinguish the flame. If the Vessel Response Plan is activated, a Salvage Master and commercial firefighting company may assist (or relieve) the initial firefighting team(s). This action does not supersede the authority of the jurisdictional fire department, only supplements/relieves the initial firefighting team(s).

- Establish the Unified Command comprised of COTP, jurisdictional Fire Chief,
- Vessel PIC, others jurisdictional agencies as appropriate;
- Set adequate Safety Zone to protect public and other vessels;
- Issue BTNM
- Consider assistance from special teams (SUPSALV, CG Strike Team (atmospheric monitoring), CG SERT, etc.)

3064 Firefighting aboard a Military Vessel

Response to a fire onboard a military vessel, whether U.S. or foreign, is handled in a different manner than a fire onboard a private/commercial vessel. Military vessel crews are highly trained for fires on their vessels, using their firefighting procedures, equipment, and familiar with the layout of the vessel. The commanding officer on a military vessel has ultimate authority on whether or not to allow outside firefighting organizations onboard to augment firefighting efforts.

However, the following actions should be taken by the jurisdictional firefighting responders upon notification of a fire onboard a military vessel:

- Establish a Unified Command comprised of COTP, jurisdictional Fire Chief, Military Ship Liaison or senior officer, and other jurisdictional agencies as appropriate;
- Upon arrival, the Fire Chief should report to the ship's quarterdeck to engage with the ship's Command Duty Officer (CDO) to determine if they're assistance is required;
- If firefighting assistance is required, the CDO and Fire Chief will determine location of the forward command. Once established, all information regarding the fire will be relayed to the Unified Command along with communication procedures between the ship's crew and the attending municipal firefighting team(s). The Fire Chief (or designated team leader)

will be responsible for managing resources, personnel and staging of equipment onboard the ship.

- If no firefighting assistance is required then the jurisdictional Fire Chief may assign one firefighting engine/team to remain on-scene for standby purposes. The
- Fire Chief may then remain with the Unified Command as long as needed;
- The Fire Chief / Unified Command may request additional resources in accordance with the state-wide mutual assistance agreement. (See section 6000 of this annex).

3065 Firefighting at a Waterside Facility

Initial response operations will be the responsibility of the facility manager/operator in unison with the jurisdictional Fire Chief. The response to a facility fire is essentially the same as a vessel fire. For regulated facilities, amplifying information can be found in the Facility Response Plan (FRP).

3066 Firefighting at a Marina

SE Florida is home to several marinas in the region, many capable of accommodating a multitude of yachts including those 200' and greater in length moored closely to each other. These marinas may provide hotel services (electrical, water, sewage, etc.) and transfer fuel from landside truck delivery. Most, if not all vessels in a marina are composed of fiber-reinforced plastic ("fiberglass"). A fire in a marina can quickly escalate and involve adjacent yachts to the fire's origin.

Every marina usually features basic firefighting equipment (hydrant, hoses), and will contact the nearest fire department for assistance (911). The jurisdictional Fire Chief will normally be the IC with the COTP coordinating the response in a support role in these incidents. The COTP is responsible for ensuring the owner of the vessel/marina remediates any pollution resulting from the fire.

3067 Environmental Considerations During Firefighting Responses

Oil and hazardous materials may enter the water during firefighting water run-off and dewatering operations. Additionally, commonly used firefighting agents are considered marine contaminants as well. Examples include:

- PKP (Purple Potassium Powder) used in LNG fires
- AFFF (Aqueous Fire Fighting Foam) polar and non-polar used in burning liquids

Containment and recovery of these materials is an important environmental consideration. The determination to fight the fire over the environmental concerns will continually need to be evaluated to the prevailing conditions (burning containers, potential for sinking the vessel, potential for escalation/explosion, etc.).

At a minimum, the jurisdictional County Environmental Manager, FLDEP, and/or Region Response Team 4 should be notified of the incident for emergency consultation to develop

appropriate pollution prevention protocols from discharges of firefighting water and dewatering operations.

Examples include double booming to catch residual sheening during dewatering or even the use of frac tanks.

3068 Air Monitoring Considerations

The smoke plume from a fire usually rises several hundred to several thousand feet. It then levels off and is blown by the wind in a narrow, and often meandering band while dissipating. After that it moves about according to weather conditions. Some parts of the plume occasionally dip back down toward the surface but the majority of the smoke usually stays well up in the air. If the wind is blowing toward a populated area there must be reasonable assurances that people will not be exposed to excessive concentrations of pollutants. The particulates released into the atmosphere by smoke from a fire are a concern to many people. Monitoring of populated areas should be conducted to keep population centers safe.

3070 Dewatering

Dewatering and vessel stability considerations need to be addressed before firefighting water is applied to the fire. Although vessels will have bilge pump capacity, these pumps are limited to pumping water that settles into the lowest areas of the vessel; they are also susceptible to clogging. Moving and operation of portable pumps aboard a vessel/barge will require hoisting equipment and personnel in addition to those assigned to the fire fighting.

3080 Delays in Resource Arrival

- Due to distinct nature of the Sector Miami Area of Responsibility with five distant ports, response planners and incident commanders must be cognizant that resource delays may be encountered;
- Protracted operations, such as during Level II responses, will require relief of first responding units and mutual aid elements that may be traveling long distances;
- Responding fireboats to fires in the Miami River may be significantly slowed by closed bridges that cross the river.

3090 Assist Tugs

In nearly all marine fire situations, tug companies should be contacted early in the planning phase to evaluate their capability and willingness to provide towing assist and transportation services to burning ships.

They may also be called upon to move barges or moored vessels in close proximity of the fire or provide logistical support to firefighting teams.

3100 Fire Boats

Refer to Section 6000 of this annex for local and regional marine firefighting capabilities.

3110 Communications

The FCC has designated three frequencies, 154.126, 154.260, and 154.290 MHz, as the Fire Mutual Aid Radio Systems (FMARS) to provide for common communications between firefighting units from different agencies operating at a common incident.

In addition, the following may be utilized as a working frequency/channel during a fire response:

Radio Frequencies
VHF-FM Channel 21A
VHF-FM Channel 22A
VHF-FM Channel 81A
800 MHz

Table 3110.1 Emergency Operations Working Frequencies

Complications may arise if responding units do not have access to FMARS. To ensure all assets are able to communicate consider starting communications on Channel 16 and transferring to an alternate frequency within Table 3110.1.

4000 Marine Fire Fighting Response

4010 Marine Firefighting Guidance

Land based fire fighters will normally fight fires at waterfront facilities using conventional structural firefighting tactics. Vessel fires require entirely different strategy and tactics commonly taught in Marine Firefighting courses.

All incident-specific firefighting strategies and tactics will be developed and evaluated using the extensive information and advice in NFPA Standard 1405, Guide for LandBased Fire Fighters Who Respond to Marine Fires.

Coast Guard activities are also to be in accordance with Chapter 8, CG Marine Safety Manual, Volume VI, COMDTINST 16000.11(series).

The Coastal Management Program is responsible for the maintenance and protection of the state's coastal wetlands. The main function of the Office of Coastal Management is the regulation of uses in the Florida coastal zone, especially those which have a direct and significant impact on coastal waters. It is the goal of the Office of Coastal Management to protect, develop, and restore or enhance the resources for the state's coastal zone. Their link can be found: Florida Coastal Management Program | Florida Department of Environmental Protection

State Policy

Florida State Statute 252 (Emergency Management) gives the State Director of Emergency Management (FLDEM) authority to provide support from available personnel, equipment, and other resources of state agencies and political subdivisions of the state that may be necessary to reinforce emergency management agencies in areas stricken by the emergency. This support is normally provided through the County emergency operations center (EOC) as a coordinating body, however direct assignment to the jurisdictional Fire Chief may also occur if urgency demands.

Local Policy

The owner/operator of a waterfront facility and the master of a vessel moored at a facility have a vested interest in the protection of the crew, facility, vessel and cargo. In the event of a fire, prompt notification must be given to jurisdictional response agencies. The vessel/facility should contact the jurisdictional fire department by calling 911 and/or hailing the United States Coast Guard via VHF CH-16 if unable to call 911 due to poor reception.

It is essential that both County emergency management officials and COTP be notified immediately of any marine fire. Notifications should be conducted in accordance with section 4040 of this annex for rapid, efficient dissemination of information. Local standard operating procedures may dictate additional notifications.

The fire department within whose jurisdiction the vessel/facility lies or is moored is the responsible fire suppression agency and is in charge of all firefighting efforts. The fire department which has jurisdiction will:

- Act as Incident Commander;
- Establish a command post when acting as IC;
- Request necessary personnel and equipment including fire boats, scene support, and appropriate medical aid;
- Determine the need for, and request mutual aid;
- Notify the COTP. Make all requests for Coast Guard/federal personnel, equipment, and waterside security through the COTP;
- Establish liaison with police departments for landside traffic and crowd control, scene security, and evacuation;
- Provide portable communications equipment or designate a commonly used frequency to response personnel from outside agencies to establish an interagency communications network.

In order to fulfill its obligation, which cannot be delegated, the jurisdictional fire department may request mutual aid assistance from neighboring fire departments and/or support for other agencies either directly or through its respective County EOC (ex: statewide mutual assistance agreement). In port areas where a vessel is underway or at anchor and near the boundary between adjacent counties or cities, such that the exact location of the vessel is not easily determined, the fire department closest to the site shall respond in accordance with the state-wide mutual aid agreement until a position can be fixed by the Coast Guard, pilot, or master. If another department has jurisdiction, a transition process will occur and the relieved fire department will then provide support as requested.

4020 Basic Priorities of Firefighting

It is impossible to anticipate every task or activity that will be required to effectively respond when dealing with a major marine fire. There are, however, several basic priorities which must be addressed particularly in the case of a vessel fire at sea. Operational firefighting priorities listed in order are:

Rescue: Life safety must always be the first consideration in any fire or emergency situation. When lives are in danger, the IC must quickly assess whether the situation first necessitates immediate removal of personnel.

Exposures: The fire should be fought so as to prevent the spread of fire on or off the vessel. Typical exposures include flammable liquid or gas tanks, open stairways, explosives, or any other substance which would accelerate or aid the spread of the fire.

Confinement: The effort to establish control over the fire through impeding the fire's extension to non-involved areas and limiting the fire to its area of origin. To accomplish proper containment:

- Secure all closures and generally all ventilation (unless personnel are trapped inside the space);
- Establish primary fire, smoke, and flooding boundaries. Primary boundaries are critical to the control of a fire;
- Monitor and cool the boundaries, as necessary (if steam is produced when sprayed with a fog pattern, continue to cool the surface), on all six sides of the fire (fore, aft, port, starboard, above, and below).

Extinguishment: The main body of the fire should be attacked and suppressed. The goal is to cease combustion by disrupting the cycle of the fire tetrahedron. Tactics and agents to be used will be determined by the fuel source, amount of fuel/surface area and location of the fire.

Stability: The introduction of large amounts of water for firefighting can significantly alter the center of gravity of a vessel. Experts from the Marine Safety Center, National Strike Force, of Navy Supervisor of Salvage should be consulted for stability calculations and advice. In addition to responder safety issues, listing can hamper the firefighting effectiveness by:

Difficulty in maintaining a foam blanket;

- Location of shipboard fire pump intakes above waterline
- Location of sumps to fixed dewatering system unable to fully dewater space;
- Shifting of unsecured equipment and machinery (failures to securing mechanisms) exaggerating degradation of stability.

Overhaul: Actions to complete incident stabilization and begin the shift to property conservation. Considerations during overhaul include:

- Hazards from structural conditions at the fire scene;
- Atmospheric conditions (air packs should remain mandatory in the case of interior fire overhaul due to the likely presence of toxic vapors, carbon monoxide, and low oxygen levels);
- Monitor scene to ensure the fire will not re-ignite (ex: integrity of foam blanket, etc.)
- Determination of the fire's point of origin and source of ignition;

- Access control of watertight doors to manage flooding boundaries (stability and free surface effect).

Detailed photographic records of the fire scene prior to clearing any debris is highly recommended to aid in post fire investigations.
Ventilation: Ventilation tactics will vary depending upon the location and conditions of the fire. Generally, all ventilation on a vessel will initially be secured and all dampeners shut upon receipt of a fire alarm. The purpose in ventilation shutdown is both to decrease the flow of oxygen to the fire area and to begin the containment process.
De-Watering and Salvage: As noted in NFPA 1405, basic stability data should be gathered during the initial stages of the incident:

- Drafts should be monitored at least every 30 minutes to identify any changes in stability;
- Vessel listing should be monitored at least every 15 minutes to quickly identify any changes in stability;
- Monitoring should continue at least four hours after water flow has stopped;

4030 Response Sequence

Action in response to a fire incident is broken into five phases for this plan's purposes:

Phase I Discovery and Notification
Phase II Evaluation and Initiation of Action
Phase III Assessment of the Situation
Rescue>>Exposure>>Confinement>>Extinguishment>>Overhaul/Salvage
Phase IV Demobilization
Phase V Documentation and Cost Recovery (Collection of Lessons Learned)

4040 Notifications and Dispatch

Regional Contact	Radio Frequency / Channel	Emergency Contact Number
USCG Sector Miami	VHF-FM 16	350-535-4472
FL State Watch Office	24 hours	(850) 413-9911 1-800-320-0519
Fire Department	Radio Frequency / Channel	Emergency Contact Number
Miami-Dade Fire Rescue	800 MHz	Fire Alarm Office Chief 786-336-6618 (24 hrs)
City of Miami Fire Rescue	800 MHz	911
City of Miami Beach Fire Rescue	800 MHz	786-856-6380

Broward County Sherriff's Officer Fire Rescue Port Everglades	800 MHz	911
City of Fort Lauderdale Fire Rescue	800 MHz	954-557-2774 (24 hrs) 954-828-3561 (Boat House)
Palm Beach County Fire Rescue	800 MHz	Fire Ops Officer (24 hrs) 561-712-6552 Dispatch Sup (24 hrs) 561-712-6550
Riviera Beach Fire Rescue (Port of Palm Beach)	800 MHz	Duty Fire Chief 561-843-0976 (24 hrs) Duty Ops 561-371-3979 (24 hrs)
City of Boca Raton Fire Dept.	800 MHz	(561) 367 - 6700
Martin County Fire Rescue	800 MHz	(772) 220-7000 (772) 220-7170
Indian River County Fire Rescue	800 MHz	(772) 226-3281
St Lucie County Fire Rescue	800 Mhz	(772) 621–3501

4050 Command Posts and Jurisdictional Command

To effectively combat a major fire, an Incident Command Post (ICP) must be established as soon as possible. A command post provides several critical services:

- A single central site for command and control of the response. This reduces confusion among response personnel;
- Ready access to continuous communications between on-scene and off-scene personnel.

The nature and location of the fire will be the deciding element in determining which agency assumes incident command or if a Unified Command involving numerous contributing jurisdictions should be established. Incident Command must be established as early as possible in the incident to ensure effective use of personnel and equipment.
Upon arrival of the first response unit, the senior response officer assumes incident command, assesses the situation, determines what additional assistance is needed, and reports conditions observed to the emergency dispatch center for relay to all jurisdictional agencies.
During the course of an incident (from arrival to clean-up), the lead agency may change as incident conditions change. Response management for incidents occurring to vessels underway, at an anchorage, and shore side are discussed in the following sub-sections.

4060 Unified Command

In instances where several jurisdictions are involved or several agencies have a significant management interest or responsibility, a unified command with a lead agency designation may be more appropriate for an incident than a single command response organization. Generally, a unified command structure is called for when:

- The incident occurs within one jurisdiction but involves several agencies with management responsibility due to the nature of the incident or the resources needed to combat it;
- The incident is multi-jurisdictional in nature because it affects or has the potential to affect several jurisdictions.

4061 Coordination of Special Resources

Requests for federal resources and Special Teams should be submitted through the COTP (USN-Supervisor of Salvage, International Cargo Bureau, USCG National Strike Force, etc.). All resources and Special Teams made available will normally come under the direction and the control of the COTP unless otherwise agreed upon by the COTP and the jurisdictional Fire Chief. State and local agency resources and Special Forces made available during an incident will normally come under the direction and control of the jurisdictional Fire Chief unless otherwise agreed upon by the jurisdictional Fire Chief.

Commercial firefighting resources (Resolve Marine, NRC, etc.) may be ordered as required by the VRP or requested by the COTP (e.g. anchorage). In such instances, a company liaison will be required in the Unified Command response organization.

4062 Resolution of Disputes

Disputes will normally be resolved at the lowest level possible. If conflict continues, the issue will be referred to the command post for resolution between the COTP and jurisdictional Fire Chief.

4070 Termination of Response Activities

The jurisdictional Fire Chief will make this decision after consulting with the COTP unless it is a Level II response where the Unified Command will determine cessation of activities.
Note: Although firefighting efforts may be terminated, the vessel/facility should maintain a fire watch for at least 48 hours after the fire is out.

4071 Post-Incident Resolution Issues

When the crisis phase of the incident has concluded, several follow-on activities may occur including:

- Port entry protocols for ships at anchor;
- Investigation into the incident (joint agency, NTSB, underwriter, etc.);
- USCG and/or Classification Surveyor assessment of hull seaworthiness;
- Lay-up potential or Classification Society proposal to allow vessel to transit to shipyard for repairs;
- Other activities deemed appropriate for incident specifics.

4072 Financial Documentation and Cost Reimbursement

In general, the USCG is self-funding in participating in firefighting activities through its Operating Expenses funds. Under some limited circumstances, the Oil Spill Liability Trust Fund (OSLTF) or Comprehensive Environmental Response, Compensation, and Liability (CERCLA) Trust Fund of 1980 and OPA '90, P.L. 101-380, may be available to reimburse firefighting expenses. This is limited only to those situations where the fire is fought specifically to abate the potential for a pollution incident. Firefighting activities related to the safety of life or property are generally not contracts for responding to discharges that pose substantial threat to public health or welfare.

See ACP Section 6060 for more information.

County and Municipal Fire Department outlays shall be funded through their normal funding mechanisms and/or reimbursed through State DEM reimbursement process.

5000 Plan Administration

5010 Exercises

Joint training and exercises are necessary to ensure smooth coordination in the event of an actual fire or incident. Realistic exercises also demonstrate the capabilities of the various organizations involved. These exercises also expose potential gaps in policy, organization, and/or resources as well as create opportunities to improve the plan.

This plan should be exercised triennially. COTP Sector Miami will schedule periodic exercises, workshops, and seminars with jurisdictional fire departments, port facilities and government agencies within the various ports of the Southeast Florida region. COTP Sector Miami recommends that each jurisdictional fire department or response organization coordinate with the port facilities and shippers in their respective jurisdictions to develop a training and exercise schedule. The COTP will also assist coordination with other organizations if a larger exercise is requested. For assistance in arranging an exercise, contact:

Commander
Attn: Emergency Management and Force Readiness Division
USCG Sector Miami
100 MacArthur Causeway
Miami Beach, FL 33139

5020 Training

Training is the cornerstone of a successful response. Effective training extends from a simple walk-through of a ship's compartmentation and Vessel Firefighting Plan for responder orientation, agency-sponsored focused workshops and courses to detailed courses provided by academia and clarification societies. Such training might discuss ship construction and basic stability, shipboard/facility firefighting, salvage coordination, and hazardous material response. Suggestions for other training, volunteer speakers and general comments should be directed to:

Commander
Attn: Emergency Management and Force Readiness Division
USCG Sector Miami
100 MacArthur Causeway Miami Beach, FL 33139

For further information consult National Fire Protection Association; NFPA 1405: Guide for Land-Based Fire Fighters Who Respond to Marine Vessel Fires.
Ultimate responsibility for the facility rests with the Terminal Manager. The Manager is not relieved of his duties, and as such must assist responding firefighting organizations in every way. The manager can provide detailed information on layout, location of hazardous materials, and may provide additional personnel to assist fire fighters.

Most waterfront facilities rely on jurisdictional/port fire departments for fire protection and suppression response. Therefore, in the event of a marine fire, facility owners/operators are responsible for ensuring safety of facility personnel as well as providing the IC with information regarding the facility's layout and dangerous materials.

5030 Plan Review

This Plan as well as the entire Southeast Florida Area Contingency Plan is available for review on the USCG Homeport website at:

https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=1746&Source=/Lists/Conten%20t/DispForm.aspx?ID=1746

Revisions/comments may be made to Sector Miami Emergency Management & Force Readiness Staff. The COTP is responsible for the administration of this Plan and will keep it current by convening a meeting with the Marine Firefighting Subcommittee of the Southeast Florida Area Committee. This committee will meet at least annually to review this Plan for accuracy and/or revision.

The Marine Firefighting Workgroup of the Southeast Florida Area Committee is comprised of representatives from each of the ports of Miami, Port Everglades, Palm Beach and Fort Pierce. A separate record will be maintained of any scheduled or ad-hoc Planning meetings with the roster and minutes available for review by all Southeast Florida Area Committee members.

Any changes and/or revisions will be annotated in the Record of Changes.

5040 Memorandums of Agreement/ Memorandums of Understanding

Developed and signed agreements will be archived here.

6000 Local and Regional Firefighting Organizations and Capabilities

County Fire Rescue Departments	Resource Description
Miami-Dade Fire Rescue (MDFR) _____ Port Miami, Miami River west of NW 27th Avenue, and non-City of Miami jurisdiction in Miami-Dade County from Haulover to Manatee Bay including Everglades response	1-55' fireboat / 8000 GPM (PortMiami) 1-50' fireboat spare / 8000 GPM (PortMiami) 1-55' fireboat / 8000 GPM (Haulover Marina) 1-36' Rapid Response Vessel (County-wide) 1-29' SAFE Boat / 500 GPM (Port Miami) Foam Distribution System (1500 Gallons AFFF) Dewatering Capabilities Shipboard Firefighting Teams Dive Team Air Rescue Capabilities Maritime Support Truck (Regional) 4 x Airboat's (Everglades)
Broward County Sheriff's Fire Rescue _____ Battalion 6 – Port Everglades	1-45' fireboat/ 500 GPM Foam Distribution System Dive Team
Palm Beach County Fire Rescue _____ Lake Worth Inlet, Boynton Inlet and Jupiter Inlet	2 Air Boats Air Rescue Capability Land-based Dive Team Land-based phone distribution system
Indian River County Fire Rescue	1-27' fire boat, "deluge gun" forward 60 GPM also fixed Dewatering pump 7200 GPH Dive Team
St Lucie County Fire Rescue	Utilizes travel packs for deploying/firefighting aboard CG Station Fort Pierce rescue boats

City Fire Rescue Departments	Resource Description
City of Miami Fire Rescue _____ All marinas from Haulover to Black Point Marina, and Miami River	2-50' fire boats/ 7000 GPM each Foam Distribution System Dive Team

City of Miami Beach Fire Rescue _____ Miami Beach marinas and Key Biscayne	1-28' fire boat/ 1000 GPM Foam Distribution System UAS (Drone) FLIR
City of Fort Lauderdale Fire Rescue _____ Port Everglades through BSO Fire Rescue	1-43' fire boat/ 4000 GPM 1-29' fire boat/ 1000GPM Foam Distribution System Dive Teams
City of Riviera Beach Fire Rescue _____ Port of Palm Beach	Land-based only
Indian River Shores Fire Rescue _____ Fort Pierce Inlet to Sabastian Inlet	1-27' Boston Whaler - fixed fire pump / 400 GPM turret can be attached to a "Y" gate for a second hose 1-15 RHIB quick launch vessel Dive Team

Commercial Fire Response Teams	Resource Description
Resolve Marine Group	1-4000 GPM Portable Fire Pump Multiple 200-5500 GPM Dewatering Pumps 1100 Gals Firefighting Foam Multiple (<= 1500 GPM) Cargo Lightering Pumps 8-person Firefighting Team 8-person Salvage Team
T&T Salvage	1-2650 GPM Portable Fire Pump (< 4hrs) 1-1500 GPM Portable Fire Pump (<18 hrs) 7-1500-6000 Portable Fire Pumps (<24 hrs) UAS (Drone) (<6 hrs)

The COTP/FOSC, under the SEFLAC, has established and convened a Salvage and Marine Firefighting Subcommittee to advise on maritime matters. The Subcommittee brings together appropriately experienced representatives within the FOSC/COTP zone to continually assess risks to the ports, document the variety of resources available to respond to an incident, determine appropriate risk mitigation strategies, and develop, revise, and implement the appropriate local

plans. The Subcommittee will also serve as a mechanism by which threats are communicated to port stakeholders and other Committees (i.e. Area Maritime Security Committee, WCFAC, Local Emergency Planning Committees, and Port Safety Council).

The objectives of the Subcommittee include:

- Assisting in the development, review, and update of this annex, aimed at maintaining acceptable risk levels during normal operations and during incidents.
- Assisting with a comprehensive Risk Assessment. These assessments must detail the threats, vulnerabilities, and consequences associated with each port area within a COTP/FOSC zone.
- Soliciting stakeholder recommendations for continuing improvements of response measures.
- Developing and maintaining a Training & Exercise Program (i.e. consolidated list of training resources).
- Promoting effective incident response measures that maintain or enhance operational efficiencies and minimize impact to legitimate trade.

7000 Marine Firefighting Quick Response Sheet (QRS)

Updated: 20 November 2019
MS_03

SECTOR MIAMI

CGTTP 3-56.1
Command Center QRCs TTP

MARINE FIRE / EXPLOSION (Vessel / Facility) STOP COMPLETE MARINE CASUALTY QRC	Date / Time
Short Title:	MISLE
Watchstander:	CIC : ☐ Yes or ☐ No

INITIAL INFORMATION COLLECTION – AWARENESS			
Incident type:		Location:	
REPORTING SOURCE INFORMATION			
Name:	Phone:	Vessel name:	Doc #:
R/S Address if calling from shore:			
VESSEL INVOLVED			
Type:			
Vsl Name:	Flag:	Doc / IMO#:	POB:
POB accounted for?	Vessel in immediate danger?		
Length:	Cargo:	Fuel onboard:	Hazards:
Pollution: Real / Potential? (If there is a potential reference Pollution QRC)		Product Type / Quantity:	
Have tanks been sounded? (If no, direct them to)		Is source of pollution secured?	

What actions has the Responsible Party taken?		
Barge Info:	Number of barges:	Cargo:
Is vessel blocking the channel? HAZNAV?		
Vessel Master Name / Address / Phone:		
Master's Name / Phone #:		
Agent's Name / Phone #:		

INJURIES / DEATH *IF YES, USE MEDEVAC QRC*	
How many injuries / Deaths?	Name of Individual(s):
Individuals job / position:	Nature of Injury:

ON SCENE WEATHER

VISIBILITY	WIND	SEA CONDITION		TEMPERATURE	
	Direction / Speed	Height	Direction	Air	Water

SUNRISE / SUNSET	TIDAL CURRENT	NEXT TIDE		MISCELLANEOUS
	Direction / Speed	High/ Low	Time / height	

INITIAL ACTIONS

_____ Determine Marine Incident to be

- ☐ Major
- ☐ Significant
- ☐ Serious

_____ Is there a potential of pollution? If yes, refer to pollution QRC

_____ Initiate CIC (if applicable)

_____ Open MISLE case (if applicable)

_____ Complete Initial SAR Check sheet / related QRC(s) (if applicable)

_____ Contact 911

_____ Notify National Response Center (NRC)

_____ Determine the need to brief any other personnel (FAC, IMD, IO, etc)

_____ Contact vessel / facility security officer if appropriate.

_____ Collect and distribute information from all LE databases (if applicable).

_____ Determine appropriate Security / Safety Zone *refer to Implement Safety/Security Zone QRC*

_____ Issue SMIB

_____ Send Command E-Mail to !PREV and !IMD distribution

PLANNING

_____ Receive or develop tactical plan

_____ Conduct ORM

_____ Brief P-Call

PEACE MODEL – IDENTIFY HAZARDS

☐ Planning	☐ Event Complexity	☐ Asset Selection	☐ Communications	☐ Environment

STAAR MODEL – IDENTIFY OPTIONS

☐ Spread out	☐ Transfer	☐ Avoid	☐ Accept	☐ Reduce

OPERATIONAL EXECUTION

_____ Dispatch appropriate unit

_____ GAR score from responding unit(s). _____☐ Green(0-23) ☐ Amber(24-44) ☐ Red(45-60)

Concerns_____

CC GAR

Assets GAR Scores:	Supervision:	Planning:	Crew Selection	Total GAR Score:_____
	Crew Fitness:	Environment	Complexity:	☐Green (0-23) ☐Amber (24-44) ☐Red (45-60)

_____ Monitor case

_____ Reevaluate plan for asset concerns as needed

CONCLUSION

_____ Send Command E-Mail to !CASE CLOSED distribution list

_____ Submit MISLE Case for review

POLICY/PROGRAM INFORMATION

References:

a. United States Code Annotated (USCA) Title 46, Chapters 61 & 63
b. Code of Federal Regulations (CFR), Title 33, Part 173
c. Code of Federal Regulations (CFR), Title 46, Parts 4 & 197
d. Marine Safety Manual, VOL V, COMDTINST M16000.10A
e. Critical Incident Communication, COMDTINST 3100.8A
f. USCG & National Transportation Safety Board Memorandum of Understanding (MOU)
g. Coast Guard Addendum, COMDTINST M16130.2

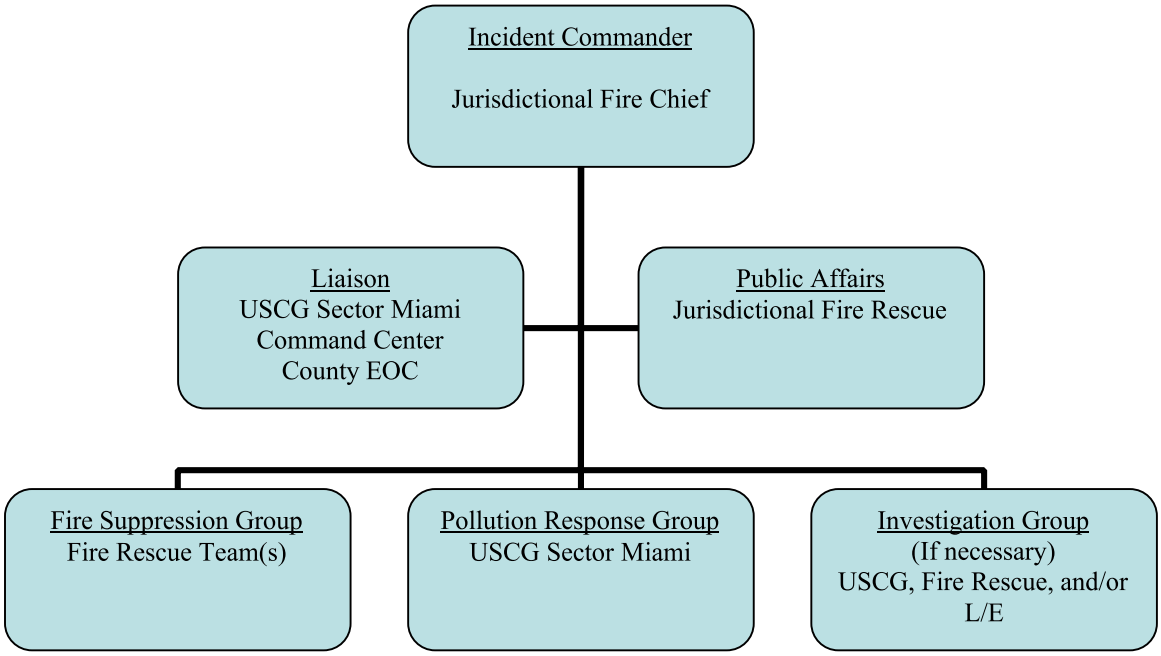
Marine casualties are any casualty or accident involving any vessel, other than a public vessel, if it occurs on U.S. navigable waters, waters of U.S. territories/possessions, or subject to U.S. jurisdiction; or involve any U.S. vessel that is not a public vessel anywhere. Casualties include but are not limited to events such as:

1. Any fall overboard, injury, or loss of life of any person.
2. Any occurrence involving a vessel that results in:
   a. Grounding;
   b. Stranding;
   c. Foundering;
   d. Flooding;
   e. Collision;
   f. Allision;
   g. Explosion;
   h. Fire;
   i. Reduction or loss of a vessel's electrical power, propulsion, or steering capabilities;
   j. Failures or occurrences, regardless of cause, which impair any aspect of a vessel's operation, components, or cargo;
   k. Any other circumstance that might affect or impair a vessel's seaworthiness, efficiency, or fitness for service or route; or
   l. Any incident involving significant harm to the environment.

   Any occurrence of injury or loss of life to any person while diving from a vessel and using underwater breathing apparatus.

8000 Recommended Response Organization

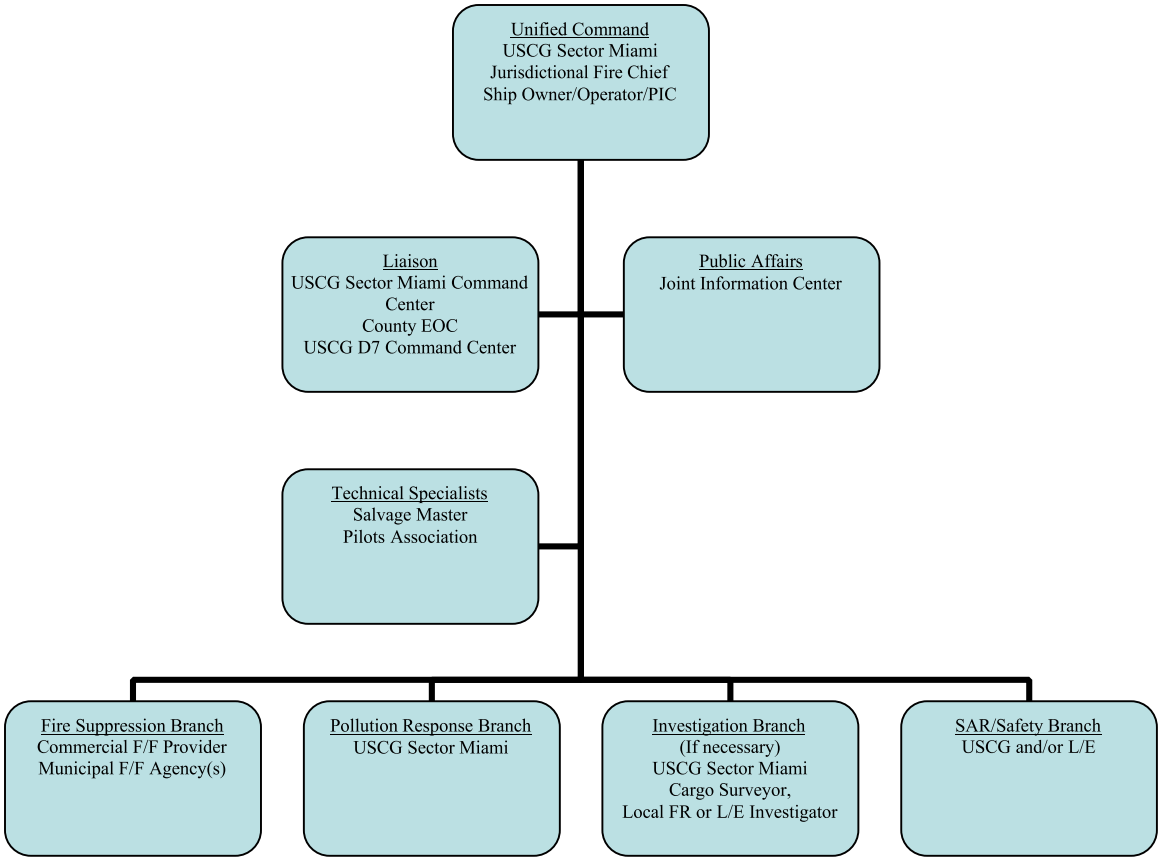
Level I Response Organization



Notes:

1) Once the fire suppression is complete and resources demobilize, Incident Command may shift as agreed upon between the responding agencies.

Level II Response Organization

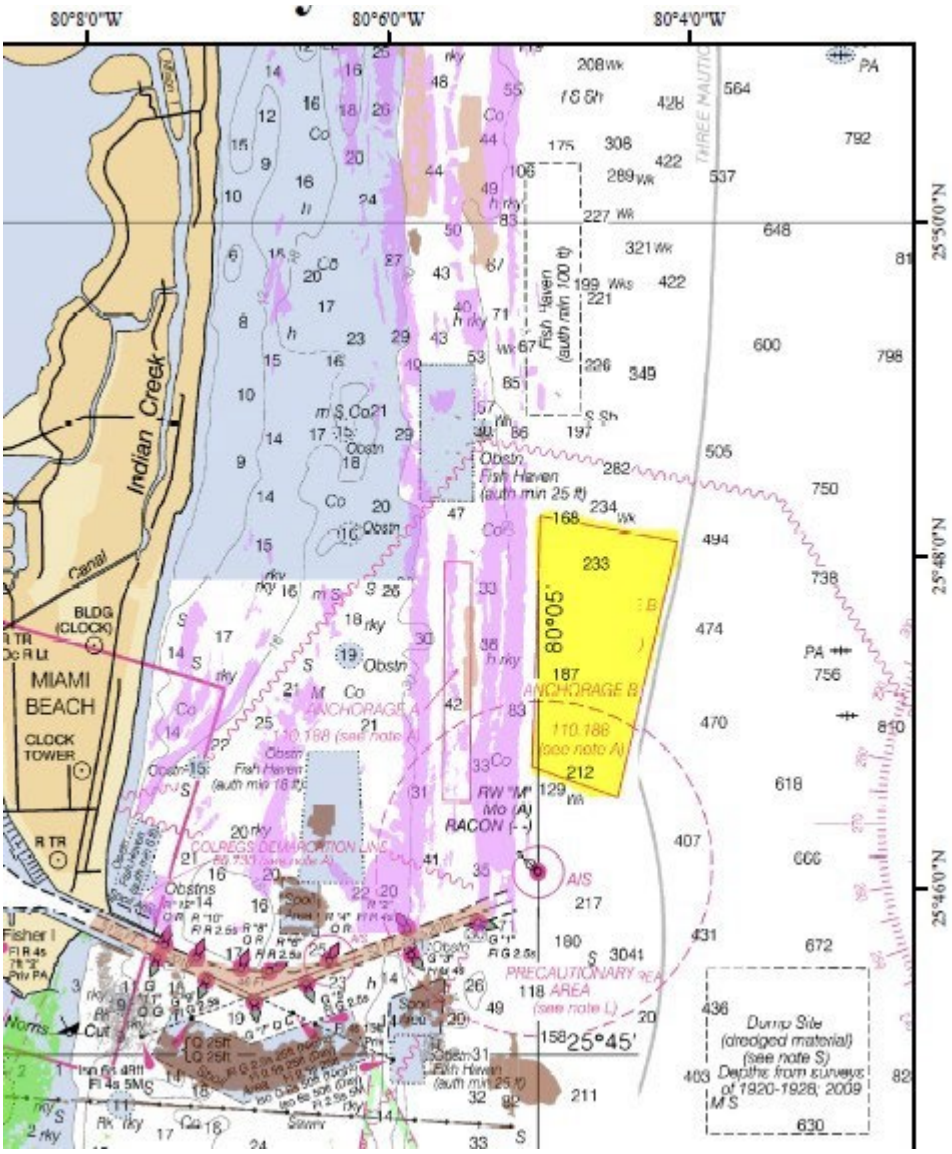


Notes:

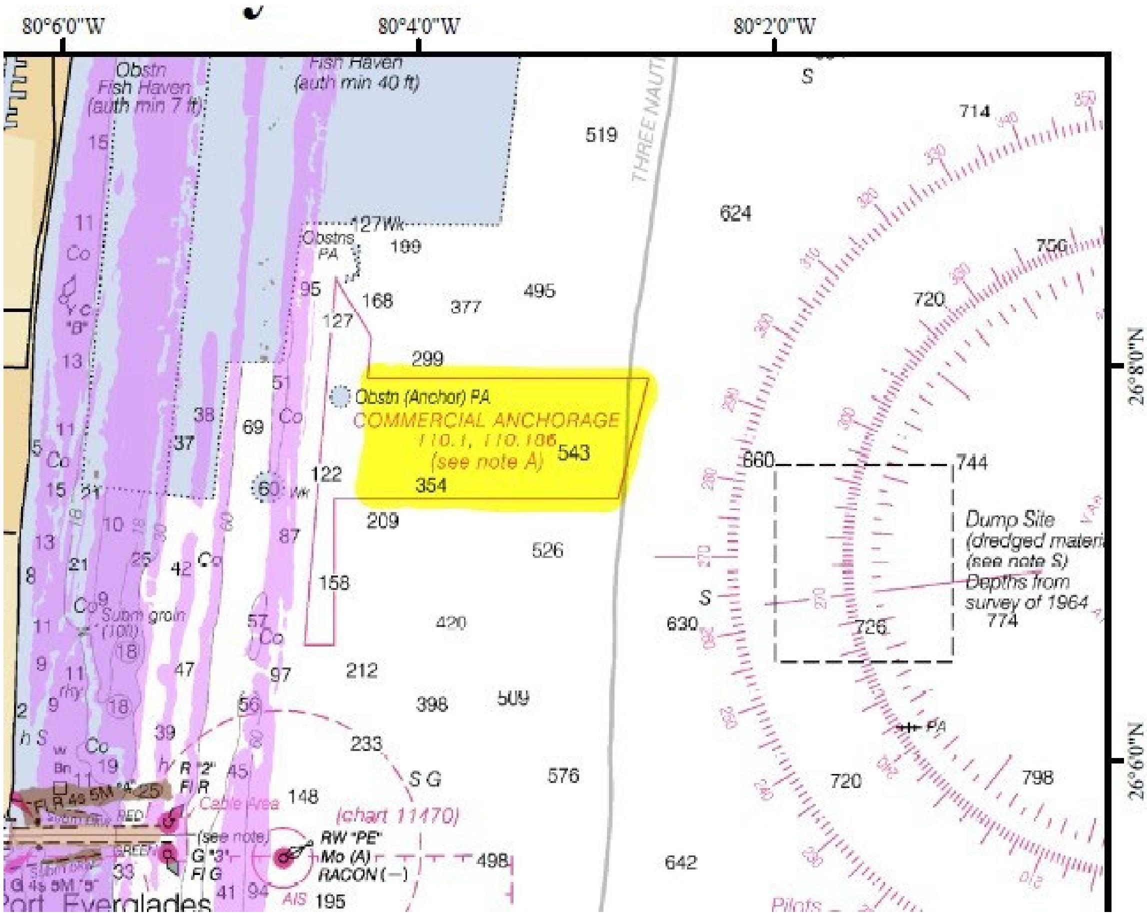
1) This organization assumes a scenario within an anchorage or other offshore locations and is only for planning purposes; actual organization should be flexible to address all issues/challenges present for actual incident.
2) Once the fire suppression is complete and resources demobilize, Incident Command may shift as agreed upon between the responding agencies.

9000 Recommended Marine Firefighting Anchorages

Port Miami Anchorage B



Port Everglades East Anchorage


80°6'0"W
80°4'0"W
80°2'0"W
26°8'0"N
26°6'0"N
Obstn
Fish Haven
(auth min 7 ft)
Fish Haven
(auth min 40 ft)
THREE NAUT
Obstn (Anchor) PA
COMMERCIAL ANCHORAGE
110.1, 110.186
(see note A)
Dump Site
(dredged materi
(see note S)
Depths from
survey of 1964
Subm groin
Cable Area
(chart 11470)
RW "PE"
Mo (A)
RACON (—)
Port Everglades
Pilots