

East Carolina University

Boating Safety Manual

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Research Vessel Users and Safety Committee

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EAST CAROLINA UNIVERSITY BOATING CONTROL BOARD

In February 2001, the East Carolina University Diving Safety Control Board (renamed the Research Vessel Users and Safety Committee in November, 2010) was charged from the Office of the Vice Chancellor for Academic Affairs with the responsibility for University Vessel Safety. In July 2006 The Board was divided into a Diving Control Board and a Boating Control Board. The Charge issued to the Boating Control Board reads:

“As a member of this Board, you are the official representative of the University in matters concerning ECU boating activities. The Board reports to the Chancellor via the Director of Diving and Water Safety, and the Vice Chancellor for Research and Graduate Studies. It is responsible for the organization, administration, and safety of university programs involved in boating.

Board responsibilities include:

- Establishing/approving policies for All University owned boats. Policies and procedures to be included in the *East Carolina University Boating Safety Manual*.
- Acting as a board of appeal to consider boating related matters.
- Establishing training requirements for persons operating University boats and related equipment.
- Recommending the issue, reissue, or the revocation of ECU boating privileges.
- Recommending acquisition of new equipment and establishing criteria for selection and use of new equipment.
- Establishing and/or approving facilities for the inspection and maintenance of boats and associated equipment.
- Sitting as a board of investigation to inquire into the nature and cause of boating accidents or violations of University boating policies and procedures.
- Approving University boating activities that are outside of the realm of standard operating procedure (SOP), or that may be deemed unusually hazardous.
- Assuring the policies and procedures related to University vessels meet minimum standards as prescribed by the US Coast Guard and other applicable standards.
- The periodic review of persons, policies and procedures related to University vessels and providing a written copy of these reviews to the Chancellor or designee.”

The information contained in this manual presents the minimum acceptable safety procedures to be employed in all ECU boating operations. No set of standard procedures can anticipate all operating situations that may be encountered, and consequently, no single individual may assume safe operation by merely following these guidelines blindly. No standards will ever exist which can substitute for common sense, sound judgment, and a continuing concern for safety. Safety is not a rule book - - it is a state of mind.

East Carolina University Research Vessel Users and Safety Committee

Members as of August 2010

Chair - Reide Corbett, ICSP/Geological Sciences

Executive Secretary – Mark Keusenkothen, ICSP/Diving & Water Safety

Members -

Lynn Harris, Maritime Studies

David Kimmel, ICSP/Biology

Ernie Marshburn, Research and Graduate Studies

Calvin Mires, Maritime Studies

Mike Muglia, CSI Manteo

Anthony Overton, Biology

Cindy Putnam-Evans, Harriot College

JP Walsh, ICSP/Geological Sciences

INTRODUCTION

Purpose and Scope

This manual has been developed to produce standardized procedures and safety guidelines for all motorized boating operations conducted under the auspices of East Carolina University (ECU). These safety standards apply to such persons who may use, for any purpose, vessels owned by or in the custody of the University, and to those who use vessels regardless of ownership, on tasks or projects of the University, or from property under the control of the University. Procedures established herein for the use of University vessels and equipment shall be followed.

OPERATOR CERTIFICATION FOR POWER DRIVEN VESSELS

The certification program is intended to ensure the safety of persons involved in vessel activities. ECU Operator Certification for Power Driven Vessels, hereafter referred to as ECU Operator Certification, is issued by the Director of Diving and Water Safety (DWS) or by his designee. ECU Operator Certification may be revoked, suspended, or restricted by the Director of DWS, the DWS Control Board or the Marine Dock Master for violations. Appeals may be made to the DWS Control Board.

ECU Operator Certification will be restricted to

- All individuals currently employed by and working for the State and covered by Article 31A (i.e. you receive a State payroll check and the State withholds taxes and deductions for benefits);
- Volunteer workers, agents of the State, officials, commission members;
- Individuals previously employed by the State and covered by Article 31A while working for the State; and
- Individuals employed by the University system, Community Colleges, or Technical Colleges and covered by Article 31A.

Note: An employee of an outside organization working in conjunction with an ECU sponsored project shall not operate a State owned vessel unless a documented proof of their liability coverage with a Certificate of Insurance and sufficient training is provided.

Requirements for Operator Certification of Power Driven Vessels

An ECU Operator Certification will be issued upon the completion of the following:

- Be sponsored by an ECU Department, Program, or Researcher.
- Be a **minimum** age of 18.
- Sign a Liability Waiver/Indemnity Agreement form as provided by the Office of DWS.
- Submit to the Office of DWS proof of certification in Cardio-Pulmonary Resuscitation and First Aid.
- Make application to the DWS Office, vessel operator application available online at www.ecu.edu/diving.
- Document a minimum of six days of on-water experience. At least 3 of these days must be in the class of vessel you wish to be certified. (Note: A day is defined as a minimum of four hours on a calendar day; only one day may be logged during a calendar day.) These prerequisite days will be logged on ECU Small Vessel Sea Service Forms (see appendix), and signed copies will be submitted to the DWS Office (Note: Additional documentation, such as a letter from previous employer, may be requested).
- Completion of the ECU Motorboat Operator Certification Course (MOCC). The MOCC is a three-day course of instruction. It includes classroom, field lectures and hands-on training. The MOCC is recognized by, and adheres to, the Department of Interior training standards. The course meets the requirements outlined by the National Association of State Boating Law Administrators (NASBLA).
- An individual holding a USCG Captain's License is exempt from the MOCC training requirement, but must receive an orientation to the specific vessel and log at least 2 days on an ECU vessel in the same class prior

to operation under ORV. In addition, they must complete the academic portion of the operator training program.

- The State of NC requires any operator under the age of 26 to complete a NASBLA approved boating education course. ECU's MOCC does NOT meet this criterion. Therefore, any operator under 26 must also complete and pass a NASBLA approved boating education course. See <http://ncpaws.org/boatingsafety/coursesearch.asp> for NASBLA approved boating education courses.

Academic Portion:

- An individual must complete an academic training module specific to ECU boating regulations, the Boating Safety Manual, and the ORV requirements.
- Sign a statement agreeing to abide by the rules/policies outlined in the Boating Safety Manual and the ORV module.

Skills Demonstration and Check-off:

- Upon successful completion of all prerequisites and academic elements the individual is an operator for the vessel class for which training was received (MOCC). Prior to operating vessels in a different class, operators must schedule a Vessel Operator Qualification Check-out with the University's Boating Safety Officer, or designee. This Check-out will consist of a vessel orientation, trailering (if applicable), and on-water familiarization (if applicable).

Participation in an Operator Qualification Check-out does not guarantee ECU Certified Operator status. The candidate must successfully demonstrate knowledge, skills, and abilities deemed acceptable for a particular vessel to the satisfaction of the Boating Safety Officer, or designee.

Vessel Classifications

ECU Vessels equipped with an engine are divided into four Classes	
Class A	Vessels less than 20' in length equipped with a single outboard engine.
Class B	Vessels 20' to 25' in length equipped with a single outboard engine.
Class C	Vessels equipped with twin outboard engines.
Class D	Vessels equipped with inboard engines.
Vessels with no engines are not part of the Operator classification system and have restricted operational environments. Safety equipment and float plan requirements still apply to unclassified vessels.	

GENERAL RULES OF OPERATION

1. Vessel Manning Requirements

Inland waters (inside the Boundary lines as defined by 46 CFR Part 7)	
Vessels <35 feet w/open deck design	Vessels >35 feet w/open deck design
1 – USCG licensed Master or 1 – Instructor w/training*	1 – USCG licensed Master
Vessel <35 feet with cabin	Vessels >35 feet with cabin
1 – USCG licensed Master or 1 – Instructor w/training* and 1 – Deckhand w/training*	1 – USCG licensed Master and 1 – Deckhand w/training*

Seagoing Vessels (beyond the Boundary line as defined by 46 CFR Part 7)	
Vessels w/open deck design regardless of length	1 – USCG licensed Master
Vessel with cabin design regardless of length	1 – USCG licensed Master and 1 – Deckhand w/training* (additional deckhands may be required depending of vessel design. To be determined by the USCG Marine Inspector during exam)

WHEN VESSEL IS OPERATED MORE THAN TWELVE (12) HOURS IN ANY TWENTY-FOUR (24) HOUR PERIOD, THE VESSEL MUST PROVIDE AN ALTERNATE CREW. IN LIEU OF A SECOND MASTER, A LICENSED MATE MAYBE SUBSTITUTED.

*Training: will consist of the Instructor/deckhand receiving either a boating course or instructions from a licensed captain in the operation and characteristics of the vessel he/she is operating.

2. **Ultimate responsibility for safe operation rests with the boat operator.** It is his/her duty to refuse to operate a vessel if in his/her judgment, conditions are unsafe or if he/she would be violating the precepts of his/her training or the rules of this document. Federal laws state that the operator is responsible for making sure all gear, vessel systems, and equipment required by federal regulation, or that directly affect personal or vessel safety, are working properly before departure. The boat operator of a vessel is liable for violations. The operator of a vessel is ultimately responsible for his/her own safety and the safety of the vessel and its crew. Therefore, boat operators are responsible for understanding and abiding by Federal, State, Local and ECU regulations concerning safety, rules of the road, vessel usage, certification and required equipment. An unsafe condition is grounds to cancel an operation or discontinue an operation in progress.
3. No person shall alter any vessel system or lifesaving apparatus without permission from the DWS Control Board, DWS Director or Marine Dock Master.
4. In emergencies or in other cases where it is necessary to deviate from accepted procedures, boat operators may use their own discretion, but may be required to justify their actions in a written report to the DWS office.
5. Boat operators must assure that trailers used on ECU operations meet all Federal, State, Local, and ECU requirements for safety.

Trailer Safety

- Tow ball and coupler must be the same size and bolts with washers must be tightly secured.
- Coupler must be completely over the ball and the latching mechanism locked.
- Trailer must be loaded evenly from front to rear and side-to-side.
- Safety chains must attach crisscrossed under the coupler to the frame of the tow vehicle.
- All trailer lights (turn signals and brake lights) must function properly.
- Ensure appropriate brake function.
- Side view mirrors must be large enough to provide unobstructed rear views on both sides of the vehicle.
- Tires (including spare) must be checked for appropriate inflation.
- Monitor wheel bearings efficiency and effectiveness.

6. Boat operators are required to follow legal limits set forth on the boat's weight capacity label.
7. Boat operators must report accidents to the DWS office as soon as possible after occurrence. An accident form must be filed with the Office of DWS within 24 hours of the accident. See definitions.
8. Programs requiring operations outside the parameters of this manual require notification to the Office of DWS. Sufficient lead-time prior to the operations must be allowed for processing notifications of adherence to safety.
9. Boat operators are required to file a float plan in accordance with this document prior to boating operations. The purpose of a float plan is to have a shoreside person who knows the identity of those persons on the water, where they are going, and when they are coming back. If the persons on the water become overdue, the shore side contact is responsible for notifying proper authorities.
10. Boat operators are expected to check the weather forecasts before beginning operations.
11. Operators are required to share information related to safety equipment with everyone on board prior to departure. This information includes location of safety equipment, wearing of safety equipment, safety concerns while underway, location of accident procedures checklist, and any information relative to safety and the vessel mission.
12. Boat operators must be certain that prior to boarding, all passengers have signed the required waiver of liability/indemnity agreement form, unless prior approval is obtained from the DWS office.
13. ECU boats are "**DRUG FREE VESSELS**" as defined by the Coast Guard. Illegal substances are not permitted nor tolerated aboard. It is the operator's responsibility to assure as best as possible, that there are no illegal drugs on board and that all passengers and crew are free of the effects of any drugs that may cause impairment in judgment critical to the safe operation on an ECU vessel. Any person found to be in possession of illegal substances aboard an ECU boat would be permanently denied access, in any capacity, to ECU vessels. ECU alcohol policies shall be adhered to on all vessels.
14. Vessels shall be operated at a safe speed to avoid collision, property damage and passenger injury. In determining safe speed these factors should be considered: weather, vessel maneuverability, visibility, traffic, sea state, current, navigation hazards, draft, depth of water, the possibility of floating objects, and other factors relative to safety.
15. It is the responsibility of the boat operator to use every reasonable means to become familiar with their intended areas of operation. This may include requesting an orientation checkout of the area from the Marine Dock Master, review of charts, Coast Guard NOTAMS, Coast Guard radio advisories, local information and any other means available.

16. All persons on ECU vessels shall wear appropriate protective clothing and safety equipment for the conditions. Including but not limited to: Life Jackets, gloves, a hard hat, hearing protection, safety glasses, deck shoes and/or steel toed shoes. Hard hats must be worn whenever working with overhead equipment (e.g., A-frame operations). Floatation device and closed toed shoes must be worn during all deck operations or on open vessels.
17. Any person who operates an ECU vessel when he or she are the only person aboard must have a US Coast Guard approved life jacket on at all times.

GENERAL STATEMENT ON VESSEL REQUIREMENTS

All vessels will be maintained and be equipped to satisfy the Coast Guard standards and the appropriate local state or other jurisdictions.

Boat Reservation Procedures

Reservations are done on a first-come, first-serve basis and are made for specific dates. A Vessel Reservation Form must be filled out and hand delivered, faxed or emailed to the DWS office. Requests for extension of reserved time because of weather or mechanical issues will be considered on a case-by-case basis. Vessel availability will be contingent upon the repairs deemed necessary by the Marine Dockmaster and/or the existing workload of the DWS staff.

Check-out Procedures

A boat will be considered to be checked out when the Vessel Check-Out Form is completed and placed in the mailbox located in the boat yard.

Transfer of a boat from one operator to another is not permitted unless all are identified as approved operators and are listed on the Vessel Reservation Form.

Vessel Reservation Forms may be updated or amended during regular business hours by contacting the DWS office at 328-4041.

Check-In Procedure: A boat is considered to be checked-in when it has been returned to the ECU compound with all the assigned equipment and the completed Vessel Check-In Form has been placed in the mailbox located within the boat yard.

Vessel Modifications and Normal Wear and Tear: No person shall alter any vessel system, lifesaving apparatus or assigned equipment without permission from the Boating Safety Control Board, Director of DWS or his designee. Certified operators are expected to provide reasonable care to the equipment entrusted to them. Normal wear and tear expenses associated with vessels and equipment is expected and will be repaired at the expense of DWS.

The ECU boating definition of “normal wear and tear” is:

The failure of a boat, engine, trailer or part while being operated as it was designed to be used by the manufacturer and in accordance with training. The necessity for replacement is due to the effects of long term deterioration, corrosion, abrasion or weakening as a result of the effects of regular intended use.

Some examples of “normal wear and tear” are:

- Worn trailer tires
- Trailer bearing failures
- Frayed antenna fiberglass due to deterioration from the sun
- Nonfunctioning electrical components that have not been rewired or abused
- Minor scratches in the surface gelcoat of a hull or deck

Alterations, modifications, accidents, abuse, misuse, neglect, misplaced or stolen items, salvage and damage due to inappropriate or improper use will not be considered “normal wear and tear”. Damage caused by groundings or striking submerged objects will be reviewed on a case by case basis by the Marine Dock Master. If vessel operation is required in extremely shallow water or waters that are characterized by having trees or stumps along the bottom and shoreline, operators should consider reserving funds for fiberglass, rudder, drive shaft, lower unit and/or propeller replacement. Cases of unauthorized vessel modification or deemed beyond normal wear and tear disputed by the operator will be reviewed on a case by case basis by the Boating Control Board.

Maintenance Responsibilities:

All vessels are to be refueled prior to check-in. This includes the mixing of two cycle oil for non-oil injected engines and the topping off of oil reservoirs on oil injected engines.

If the boat was used in salt water, boat operators are responsible for ensuring that the boat and trailer are thoroughly washed with fresh water after use. ECU does not have a designated location for the cleaning of boats. Boat brushes and biodegradable soap should be utilized in the field so the boat will require only a final rinse before returning to ECU.

SEVERE WEATHER AND EMERGENCY PLAN

Boating Safety Control Board Approved 8/15/07

Introduction

East Carolina University (ECU) currently operates and maintains twenty pooled research vessels in the university boat pool and six research vessels assigned to specific campus units. Because activities related to the ECU research fleet take place on and off campus, this document outlines required actions that must be taken during Severe Weather and Emergencies.

Objective

The Severe Weather and Emergency Plan outlines specific requirements and actions required by ECU employees who have responsibility for one or more university owned research vessels. As of July 2007, responsible units include: Diving and Water Safety (DWS); Department of History; Interdisciplinary Institute for Coastal Science and Policy (IICSP); and Coastal Studies Institute (CSI).

Scope

This plan establishes procedures and organizational structure for response(s) to Hurricane, High and Low Water, Fire, and Explosion. The plan does **not** cover training requirements for captains and operators facing at-sea emergencies nor is it intended to limit the use of good judgment in matters not covered in this document.

Hurricanes

Hurricane season in the North Atlantic, Caribbean and the Gulf of Mexico normally extends from June through the end of November. Hurricane damage, personal injury, loss of life and loss of access to critical facilities can result from high winds, localized flooding due to heavy rains, and especially from higher than normal tides called "storm surge".

Based on reports from the National Hurricane Center and NC Emergency Management, emergency actions will be taken by East Carolina University (ECU) officials to ensure the safety of all vessels in the ECU boat fleet.

Pre-Season Planning and Preparedness:

Between January and April of each year DWS will review the storm readiness of all vessels in the ECU boat fleet in preparation for the upcoming Hurricane Season. This review will at a minimum include:

1. Reassessing and updating ECU's Severe Weather and Emergency Preparedness Plan.
2. Inventorying/pre-staging all equipment necessary to secure vessels during a hurricane. In lieu of a file for each boat, a chart or spreadsheet covering all vessels will be created and distributed that contains appropriate columns for specific actions and inspections. Selected items for inspection include but are not limited to:
 - a. All storm mooring equipment including ground tackle, lines of sufficient length and strength, and the chafing gear needed based on a specific hurricane plan for each vessel,
 - b. The strength of cleats and/or samson posts on all vessels,
3. The Director of DWS will conduct an annual assessment and publish a notice on the:
 - a. Structural status of local marinas, docks, or piers where non-trailerable boats can be docked during the hurricane season,
 - b. Identity and contact information of individuals responsible for executing hurricane preparations, and
 - c. Appropriate locations for anchoring vessels during hurricane conditions.

4. The Director of DWS will review the ECU boat fleet table shown below annually, adding or deleting vessels as appropriate and publishing specifications regarding how each boat in the fleet is to be handled.

ECU Boat Fleet	Responsible Unit	Trailer and Store	Secure at Dock	Secure at Dock or Anchorage	Primary Contact
Jaws	DWS	X			Baker / Diaddorio
Diatom	DWS	X			Baker / Diaddorio
Canoe (3)	DWS	X			Baker / Diaddorio
Roughneck	DWS	X			Baker / Diaddorio
Lowe	DWS	X			Baker / Diaddorio
Little Skimmer	DWS	X			Baker / Diaddorio
Alumacraft	DWS	X			Baker / Diaddorio
Electric Eel	DWS	X			Baker / Diaddorio
Jones Brothers	DWS	X			Baker / Diaddorio
Cabin Privateer	DWS	X			Baker / Diaddorio
Flounder	DWS	X			Baker / Diaddorio
Tom Cat	DWS	X			Baker / Diaddorio
Sound Bite 2	DWS	X			Baker / Diaddorio
Beeliner	DWS	X			Baker / Diaddorio
Work Barge	DWS	X			Baker / Diaddorio
Cutting Edge	DWS	X			Baker / Diaddorio
Bette G	DWS	X			Baker / Diaddorio
Cabin Seahawk	IICSP	X			Laura McKenna
18' Parker	IICSP	X			Laura McKenna
25' Parker	CSI	X			Mike Muglia
21' Parker	CSI	X			Mike Muglia

5. The Director of DWS will report the state of readiness (as related to ECU's Severe Weather and Emergency Preparedness Plan) to the Director of IICSP prior to June 1 each year.

Hurricane or Winter Storm Advisories:

When the National Hurricane Center issues a Hurricane or Winter Storm Advisory [expected landfall within 72 hours (3 days)], **the following plan will be executed by responsible employees at a pace facilitating completion within 48 hours.** If this advisory occurs while ECU research vessels are at sea, the Captain or Certified Operator will maintain communications with the DWS office at no more than six-hour intervals to evaluate each situation for appropriate actions.

- ✦ *The Director of Diving and Water Safety has the authority and responsibility for the ECU Boat Fleet and may officially suspend boat operations when conditions warrant. If such suspension be deemed necessary, ECU units operating vessels in the boat fleet will be notified, recalled, or rescheduled.*

Trailerable Vessels:

- 1) Acquire trailers (if needed), remove vessels from the water, and secure them in a safe/protected location.
- 2) Fuel all vessels. This procedure adds to the stability of the vessel during high winds events.
- 3) Secure all loose external canvas, gear, and equipment on the vessels and in the boat yard.
- 4) Remove scientific/capital equipment where possible/practical and transport to a secure warehouse.

- 5) Block tires of trailers being left outdoors and/or secure as deemed appropriate. Lighter vessels, if not secured indoors, should be secured with tie-downs and appropriate anchoring systems.

Non-trailerable Vessels

1. Currently all of the vessels in the ECU fleet are trailerable. However, if a situation arises where it is not possible to place a vessel on its trailer (e.g. due to the non-availability of a suitable ramp) complete the following safety procedures:
 - a) Completely fill vessel fuel tanks and fill potable water tanks to at least 75%. This procedure adds to the stability of the vessel during high winds events.
 - b) Test all systems including bilge pumps and associated portable pumps. Fully charge all onboard battery banks and ensure that they have sufficient capacity to pump for the duration of a hurricane event. Install fresh batteries or supplement existing battery bank if necessary.
 - c) Ensure all watertight compartments on vessels are secure.
 - d) Where practical, remove all non-essential sensitive portable scientific and navigational equipment from vessels.
 - e) Secure all loose external canvas, gear, and equipment on the vessels and in the boat yard with particular attention to wind driven hazards, floatable items and hazardous materials.
 - f) Secure power to all nonessential electrical circuits, machinery, and equipment to minimize potential damage, shock and fire hazards to the pier side shore power connections.
- 2) Recommended hurricane anchorages in the local area include: Adams Creek between the Neuse River and the Turning Basin, and Blount's Bay just east of the Washington, NC RR Bridge. In the event that a vessel is being utilized in other geographic areas (South Carolina, Virginia, etc.), the vessel operator is required to include hurricane planning as part of the float plan in the event that a hurricane threatens the area in which the vessel is operating. In these instances, prearrangements with a marina to haul and block the boat (out of the water) in advance of a hurricane may be desirable.
- 3) Anchor vessels away from the dock utilizing storm mooring equipment and double all mooring lines.
 - a) If possible, move the vessel out of the marina.
 - b) Select a hurricane mooring location where the vessel can be tied to both sides (banks) of a waterway with multiple lines long enough to allow the boat to ride-out a substantial storm surge without hitting shore, other boats, or structures.
 - c) If the vessel is moored in a creek or canal, it should be moored far enough inside that waterway to avoid interfering with the navigation of other vessels, especially when mooring lines extend to both sides of the waterway.
 - d) The vessel should be moored with bow pointed toward the greatest fetch, i.e. that line of sight with the greatest over-water distance.
 - e) If anchors are used, select a location that provides solid mooring points. In addition, anchors should be oversized, multiple, have good chafe gear, and sufficient chain to securely moor the vessel.
 - f) At the anchorage, ensure that your vessel is not obstructed by other objects, vessels, etc. through a 360 degree swing around your anchor.
 - g) Anchors should be set with long lines in the direction of the fetch, if secure mooring points are not available in that direction.
 - h) Anchor lines should be long enough to allow at least a 10 to 1 scope (anchor line length to water depth ratio, i.e. 80' line is required for 8' water depth).
 - i) Lines to solid mooring points such as trees should be at least 30 feet long, preferably more, allowing the vessel to be positioned so that potential damage from trees is minimized.
 - j) The vessel may be left at home location only if above criteria can be met at that location.

Hurricane Warning or Winter Storm Warning:

When the National Hurricane Center upgrades their notification to a Hurricane Warning or Winter Storm Warning [expected landfall within 48 hours (2 days)], **all activities describe above (under Hurricane or Winter Storm Advisory) including the three items listed below must be completed within 24 hrs.**

- 1) All vessel operations are to be assumed canceled unless notified otherwise.
- 2) Ensure that all elements of the Hurricane or Winter Storm Advisory plan (noted above) have been fully implemented.
- 3) Notify the Diving and Water Safety office (252-328-4041) that all Hurricane or Winter Storm Advisory plan preparations have been completed.

After Storm Passes:

Initiate when storm has passed and sustained wind speeds are below 40 mph.

- 1) Render assistance to campus and local authorities as necessary to save human life, prevent suffering, and mitigate destruction and further damage to property.
- 2) Compile a damage assessment, with particular attention to major safety and pollution concerns.
- 3) Use extreme caution when entering vessels or buildings due to possible shifting of equipment and other hazards created by the passing of the storm.
- 4) Commence clean up operations as needed and as safety permits.
- 5) See “ECU Spill Prevention, Control and Countermeasure Plan Based on Best Management Practices”.

High & Low Water (All Vessels to Remain in the Water)

Higher or lower than normal water levels can and do occur in eastern North Carolina. This is caused by prolonged winds “pushing” water into or out of an area within the sound. Prolonged wind driven swells and seas caused by the effect of fetch can also lead to localized flooding in low-lying areas.

Particular attention must be given to equipment and items that can either be damaged by submersion or that might float away causing hazards or pollution. Low water situations can cause extensive damage to vessels propellers, shafts, rudders and hulls. Depending on the forecasted high or low water predictions, extra precautions may be necessary to abate possible damage to the vessels, the docks and surrounding facilities.

✦ Vessels that must remain in the water during these periods of low water must be moved to locations where there is sufficient draft for the vessel to prevent damage.

It is the responsibility of the employee(s) designated as “in charge of a particular vessel” to monitor these situations and take appropriate action.

Other Natural Disasters

1. See ECU Office of Environmental Health and Safety web page for further information.
<http://www.ecu.edu/oehs/EmergencyProcedures/severeweather.htm#police>
2. In the event of a “Tornado Warning” all staff and crews will seek refuge in the nearest available shelter.
3. Actions after a tornado will be in accordance with those prescribed for hurricanes.

Fire and Explosions

The basic watchword for fires and explosions is PREVENTION. At the boatyard, dock, and onboard vessels numerous ignition sources and various types of combustibles are present that could start a fire that spreads out of control.

1. Fire science has shown that a fire can double in size every one minute. Good housekeeping is the single best method of prevention. Good housekeeping practices include:
 - a) Store flammable materials in proper and sealed containers.
 - b) Secure all portable fuel tanks and fuel containers onboard vessels.
 - c) Store previously opened flammables in flammable storage lockers.
 - d) Store all used waste oil, paints, solvents, thinners, filters, absorbent pads and oily rags in properly labeled and sealed metal containers both onboard and at the dock.
 - e) Be cautious and cognizant of open flames, sparks and heat from torches, welders, grinders, saws and drills and of open and running motors and all other ignition sources when handling flammable liquids.
 - f) Know where fire extinguishers and onboard fire suppression systems are located and how to use them (in the event of a fire).
2. The US Coast Guard requires that vessel captains are trained in basic maritime fire fighting techniques and in the use of all onboard fire fighting equipment. In addition to combating shipboard fires while at sea, this training provides a first responder fire fighting capability.
3. In the event a fire breaks out in a boat yard or storage area on land:
 - a. Immediately sound the alarm, make initial notification to 911 and the University police, and safely attempt initial action to contain and extinguish the fire before it grows or spreads.
 - b. At no time will ECU employees put themselves in a compromising situation that would endanger them or anyone around them. Personal safety will always be paramount over safety of property.
 - c. When the Fire/Rescue Department arrives they will take charge of the fire scene.
4. In the event a fire breaks out on one of the vessels while in the water dockside, the following action should be taken:
 - a. If the vessel is manned:
 1. Immediately begin fire fighting procedures via fire extinguishers and onboard fire suppression systems in the engine room.
 2. Notify the US Coast Guard, 911, the University police, and Director of DWS as appropriate.
 3. If manpower and equipment are available; the shore side fire station will be manned and charged to help cool the perimeter and other vessels provided it can be accomplished safely.
 4. When the Fire/Rescue Department arrives they will take charge of the fire scene and ECU employees will provide support if required.
 5. If a boom is available to prevent oil spills, notify the Fire/Rescue department that this equipment is available and assist with deployment as needed.
 6. **At no time will an ECU employee jeopardize themselves or anyone else.**
5. If the vessel is unmanned:
 1. Notify the US Coast Guard, 911, the University police, and Director of Diving and Water Safety.
 2. If resources are available, shore side fire equipment should be used to cool the perimeter and other vessels - provided that it can be done safely.
 3. If a boom is available to prevent oil spills, notify the Fire/Rescue department that this equipment is available and assist with deployment as needed.
 4. At no time will any ECU employees jeopardize themselves or anyone else.
 5. When the Fire/Rescue Department arrives they will take charge of the fire scene.

FLEET SPILL PREVENTION CONTROL AND CONTAINMENT PLAN

To minimize spill risks all ECU vessels, the preferred option for ships and boats is to fuel at a marina or inland gas station. However, fuel transfers by tank truck are allowed provided it is performed in strict conformance with this spill plan.

A "spill", by regulatory definition, is any amount of oil that produces a visible sheen on the water. Spills of any quantity, on any size vessel, shall be promptly reported to Environmental Health and Safety at (252) 328-6166, contained, and cleaned-up. Spills over 5 gallons shall be reported to NCDENR by EH&S.

BEST MANAGEMENT PRACTICES FOR SMALL VESSELS

THESE PROCEDURES ARE APPLICABLE TO BOTH ONSHORE AND MARINA FUELING OF VESSELS

- a. All fueling should occur onshore when possible or at a controlled marina. Controlled marinas are defined as those marinas that are designed to accept boats for on-water fueling. These marinas would normally have Spill Response capabilities at their location.
- b. If filling portable tanks, remove tanks from vessel and place on the ground to prevent problems from static electricity. Inspect portable tanks for leaks before trip.
- c. Require all passengers to get off gasoline-powered vessels before fueling.
- d. No cell phones or radios are to be used while fueling.
- e. Operators are to know where to access emergency shut off valves before starting fueling procedures.
- f. Instruct boaters to:
 1. Stop all engines and auxiliaries.
 2. Shut off all electricity, open flames, and heat sources.
 3. Extinguish all cigarettes, cigars, and pipes. Additionally, all galley fires and pilot lights must be extinguished before fueling can begin.
 4. Close all doors, hatches, and ports.
 5. Maintain nozzle contact with fill pipe to prevent static spark.
 6. Inspect bilge after fueling for leakage or fuel odors
 7. Ventilate any fuel tank and engine compartments after fueling at least five minutes until vapors have evaporated. The machinery and fuel tanks shall then be checked for the presence of fuel spills and vapors. If a spill or vapor is detected, clean up the spill and continue venting the associated spaces until the vapors are no longer detected.

8. Have spill containment materials available and insure individuals have training and proper PPE to perform any cleanup tasks that may be necessary.
- g. Know the capacity of your fuel tank prior to filling. Listen to the fill pipe to anticipate when the tank is getting full.
- h. Ensure boat stability to avoid back-splash.
- i. Don't top off tanks.
- j. Stop pumping at first sign of fuel escape.
- k. Use absorbent pads or drip buckets to collect accidental overflow.
- l. Have a fire extinguisher at hand for engine start and know the PASS method for operation of it.

PROCEDURES FOR ON-WATER FUELING

- a. All vessels conducting on-water fueling will have a Spill Response Kit readily available and ready to deploy at the first sign of an oil/fuel spill.
- b. Boom deployment is the responsibility of the vessel receiving or giving off material. Booms are best deployed by using boats or other means as necessary.
- c. The Vessel Captain is responsible for coordinating boom deployment.
- d. Vessel Captains are responsible for coordinating all petroleum transfer operations including bilge water transfers.
- e. Operation of Oily Water Separators (OWS) is strictly prohibited
- f. Absolutely no full, or partially full, tank trucks or waste fuel buffaloes shall remain on the piers or wharves during non-working hours. These containers must be sent back to the distributor at the end of the workday.
- g. An inspection of the fuel system will be conducted after fueling procedures are complete. This inspection will include checking fuel tanks, lines, and bilges for any signs of leaks.
- h. Vessels taking on or disposing of any petroleum product to/from a tank truck, buffalo, barrel or can in excess of 55 gallons on the pier or wharf shall, as a minimum, take the following measures:
 1. Notify the fire department in the local city, if applicable, that you will be conducting fueling procedures. The fire department may wish to send a representative to standby.
 2. Inspect all hoses and connections to be used in the operation. Before pumping starts, require the operator to replace any hose that appears damaged or is out of date.
 3. Seal the pier or vessel scuppers in the vicinity of the transfer operation. This is defined as an area no less than the length of the truck plus 20 feet on either side. If the hose is outside of this area, the scuppers shall be sealed no less than 20 feet on either side of the hose. Both sides of the pier shall be sealed. Aboard ship, the scuppers shall be sealed for 20 feet on either side of the transfer station. Absorbent pads shall be used to seal

scuppers, either firmly stuffed into the scuppers, or otherwise reinforced with waterbags. Rags or any other material are not acceptable. The ship is responsible for these materials and no materials shall be removed from the Spill Response Kit, except for an actual discharge. All other removals will be considered theft.

4. The Marine Dock Master shall make a Spill Kit available for each ECU vessel especially when fueling operations greater than 55 gallons are to occur on water at locations other than controlled marinas. The Spill Kit should be adequate enough to provide minimal coverage with booms around fuel port. At a minimum, oil booms and absorbent pads should be available

5. A bucket-type container of no less than five (5) gallon capacity shall be placed under each manifold or coupling connection.

6. Environmental Health and Safety has the authority to shut down or suspend any operation creating an eminent threat to life or property.

7. The pump operator shall remain at the pump while fuel or waste fuel is being transferred. In addition, a watch shall be maintained at the fuel or waste fuel tank to prevent any overflows. There shall be constant communications between the pump operator and the watch person at the tank. If a leak develops in the hoses, exercise extreme care to secure the pump before closing any isolation valves. Closing valves first will cause a sudden pressure surge that could rupture lines or connections.

b. The Facilities Services shall maintain all ECU onshore fuel storage tanks and spill response.

c. Environmental Health and Safety will also conduct the following procedures:

1. Conduct periodic inspections of fuel oil transfer operations for SPCC compliance.

2. Coordinate and direct spill containment and clean-up procedures on ECU Property. Off campus spills will be managed by local cleanup contractors.

3. Report any identified errors or omissions in the spill plan.

4. Update the Marine SPCC every five years or after two reported spills of five (5) gallons or more.

SPILL RESPONSE PROCEDURES.

a. The first person(s) on scene of an oil/fuel spill shall:

(1) If possible, immediately locate and stop the source of the spill.

(2) Notify the following personnel:

Vessel Captain

Environmental Health and Safety at (252) 328-6166

If over 5 gallons, EH&S will notify NCDENR at (800) 858-0368

Local Fire Department (**See Appendix A**)

ECU Marine Dock Master at (252) 328-4041

U.S. Coast Guard at (252) 247-4545 – for leaks over 5 gallons

(3) Energize any Fire Alarm pull station.

- (4) Contain the spill, keep it from spreading. On scene personnel shall use the pre-staged spill kit and attempt to contain the spill until help arrives. Special attention should be given to prevent entry into the storm drains, other run-offs that may lead to the water, or the sanitary sewage system.
- b. The Vessel Captain or EH&S will assume the duties of Emergency Coordinator (EC) when they report on scene. If the Fire Department responds to the spill then they will establish an Incident Command. The Emergency Coordinator will report to the Incident Commander for directions. These Emergency Coordinators have the authority to commit any and all resources of the University to direct clean-up activities. The checklist in **Appendix C** will guide spill response activities.
- c. The individual vessel responsible for the spill shall:
 - (1) Assist with clean-up efforts as directed by the Emergency Coordinator.
 - (2) Submit an after-the-fact written report (**Appendix D**), to the Environmental Health and Safety within one working day of the spill.
 - (3) Follow-up as applicable, to correct any mechanical failures that caused the spill, and correct any procedural errors that caused this spill plan to be ineffective.

CONTAINMENT AND DIVERSIONARY STRUCTURES- 40 CFR 112.7 (c) (1)

Booms or other barriers shall be made available by the Marine Dock Master for initial spill response, Hazmat response and local cleanup Contractor. Materials are kept in a “Spill Response Kit”(Appendix J).

Spill Response kits for vessels fueling away from a “controlled marina” shall contain at least a floating containment boom large enough to enclose the area of surface water where a spill may reasonably occur, but with a minimum length of thirty-six (36) feet. “Spill-dry” or other petroleum absorbent materials shall also be available to absorb spills.

Demonstration of impracticability – 40 CFR 112.7(d)

The University is committed to the prevention and control of oil spills and will make available manpower, equipment and materials necessary to handle any quantity of oil spilled. When available, localized containment (e.g. double walls and containment boxes) for all parts of the fuel system and on-water booming during fuel transfer may provide an adequate alternative. Whenever possible, all fueling should be conducted at fixed land-based sites prior to launching vessels. Spill absorbent equipment should still be kept on hand for clean ups.

Facility Drainage – CFR 112.7 (e) (1)

See Appendix I

BULK STORAGE TANKS – 40 CFR 112.7 (e) (2)

N/A

TRANSFER OPERATIONS and PROCESSES – 40 CFR 112.7 (e) (3)

TANK TRUCK LOADING / UNLOADING – 40 CFR 112.7 (e) (4)

Fuel Oil/Diesel Loading Procedures

- I. All transfers are attended and are never left unattended. All transfers of product from a tank are visually tracked by an ECU employee, or designate, to observe any spillage.

- II. All fuel truck loading and unloading procedures must meet the minimum requirements of the US DOT Hazardous Materials Regulations.
- III. Fuel Truck Driver will connect the tanker's unloading line to the vessel's tank.
- IV. Fuel Truck Driver will place buckets under pump to catch any leaking fluid due to pump packing leakage. The driver will also place buckets under the fuel pump's discharge valve/hose connections to catch any residual fluid when hose is removed from valve or pump.
- V. Fuel Truck Driver will start the unloading pump and inspect for leaks before speeding the unloading pump.
- VI. Fuel Truck Driver will remain with the truck during unloading in order to insure that the shut-off valve for the compartment being unloaded may be secured quickly should a leak develop.
- VII. Fuel Truck Driver will drain all hoses and buckets after unloading, cut off any stop valve and disconnect from the vessel's tank.
- VIII. ECU operator will monitor the unloading of fluids for any ground or on-water spills. The receiving ticket will be signed after the delivery is complete and there are no spills.
- IX. An interlocked warning light or physical barrier system or warning signs should be provided to prevent vehicular departure before disconnect of the transfer lines.

INSPECTION AND RECORDS – 40 CFR 112.7 (e) (8)

N/A – No bulk storage tanks are utilized

SECURITY – 40 CFR 112.7 (e)(9)

The impound yards are protected by locked gates and are patrolled by ECU Police.

PERSONNEL, TRAINING, AND SPILL PREVENTION PROCEDURES – 40 112.7 (e) (10)

- I. **The Marine Dock Master will instruct personnel utilizing the marine fleet in the operations and maintenance of oil pollution prevention equipment and in the basics of the facility's SPCC Plan. This training will occur each time personnel upgrade or change to a different boat size or design.**
- II. **Eric Diaddorio, Marine Dock Master, has been designated by management as responsible for oil spill prevention.**
- III. **Instructions and phone numbers regarding the report of a spill to the appropriate federal, state and local entities are listed below and have been provided with the equipment sheet for each person checking out a vessel.**
(See Appendix A)
 - a. **Notifications are to be made in the following order:**
Vessel Captain

Environmental Health and Safety at (252) 328-6166
If over 5 gallons, EH&S will notify NCDENR at (800) 858-0368
Local Fire Department (**See Appendix A**)
ECU Marine Dock Master at (252) 328-4041
U.S. Coast Guard at (252) 247-4545 – for leaks over 5 gallons

Releases of hazardous substances over CERCLA RQs must also be reported to the NC DENR by EH&S.

b. Area cleanup Contractors

- 1. Clean East Environmental Services, (252) 939-1600 or 1-800-425-6097
Hwy. 258 N., P.O. Box 189, Kinston, NC 28502**
- 2. INCO Inc., (252) 446-1174; nights & weekends (252) 446-5188
1200 Atlantic Ave., P.O. Box 2705, Rocky Mount, NC 27802**

c. Environmental Health and Safety Office supplies:
(See Appendix B)

APPENDICES

Vessel Reservation Form

RESERVATION NAME: _____

RESPONSIBLE OPERATOR(S): _____

CHECK OUT DATE: _____ RETURN DATE: _____

USE: GRANT OR ACADEMIC (please circle one) # DAYS OF USE: _____

GRANT ACCOUNT # _____

VESSEL REQUESTED: _____

EQUIPMENT AND / OR SUPPORT REQUESTED: _____

AREA OF OPERATION: _____

TYPE OF OPERATION Collecting, Diving, Survey, Other: _____

DEPARTMENT: Maritime, Geology, Biology, ICMR, DWS, EXSS, CRM, Physics, Other: _____

FLOAT PLAN(s) to be filed with: _____

Their phone number: _____

Boat cell phone number _____

My signature below certifies that I am assuming responsibility for the equipment, fuel, oil and materials listed above. The Diving & Water Safety Office reserves the right to hold my department responsible for replacement or repair cost for any equipment lost or damaged due to my negligence while in my care.

Signed: _____ Date: _____ Phone: _____

Accident Procedures Checklist
(Keep a copy of this form on the vessel)

- _____ Administer proper First Aid i.e. CPR, O2 etc.
- _____ Notify the Coast Guard on channel 16 VHF or Rescue by dialing 911.
- _____ Pass on all information relative to the accident see Call in Data Requirements.
- _____ Be sure transportation will be available.
- _____ Stay with victim.

Procedures in case of accident: As soon as possible after an accident, the Marine Dock Master or the Director of DWS must be notified. Notification is to include identification of and disposition of the victim(s), mission objectives when the accident occurred, number of vessels involved, location of the accident, all information relative to the event and the disposition of the case at the present time.

Director of Diving & Water Safety:	Office (252) 328-4041	Cell (252) 916-9595
Boating Office: Eric Diaddorio	Office (252) 744-1303	Cell (252) 916-5578
Michael Baker	Office (252) 744-1302	Cell (252) 916-5709
Campus Police	(252) 328-6787	

CALL-IN DATA REQUIREMENTS

Have the following emergency information available before calling the USCG for assistance.

VESSEL INFORMATION

Name of vessel _____ Call sign _____

Description of vessel _____

Position (LL or Loran) _____

Number Of persons on board _____ Vessel Speed _____

Type of distress and assistance requested _____

MEDICAL INFORMATION

Patient Name _____ Age _____ Sex _____

Pertinent Medical History _____

Symptoms _____

Vital signs: Conscious _____ Breathing _____ Pulse _____

Medical equipment you have on board _____

Accident Report Form

(Water Related Accidents only. Keep a copy of this form on the vessel)

DIRECTIONS: Accidents, whether involving injury or not, must be reported to the Director of Diving & Water Safety as soon as possible after the event. This report form is to be filed with the Director of Diving & Water Safety within 24 hours after an accident.

NAME _____ DATE _____

LOCATION _____

ACTIVITY _____

CAUSE OF ACCIDENT _____

CORRECTIVE MEASURES _____

INJURIES (DETAIL) _____

FIRST AID _____

DISPOSITION OF VICTIM _____

Instruction for Preparation of Float Plan

Purpose

The purpose of this float plan is to provide information and notification in case the crew is overdue, perhaps because of an emergency. This float plan form should be given to a responsible person who will expect contact from you when you reach shore. If you do not contact them by the pre-arranged time indicated on this form, they will attempt to contact you directly and failing that, they will contact the appropriate search and rescue authorities.

Instructions for item 5. Trip Expectations

Time expected to return:

This is the time that you expect to be on shore. When you reach shore, you will contact the individual with whom you left your float plan, informing them that you are back.

IN ANY CASE NOT LATER THAN:

This is the latest time at which you expect to reach shore. If you do not contact your shore-side contact that you have arrived safely, that individual will try to contact you by radio or phone (as appropriate). If they fail, they will notify the authorities that you are overdue.

Where to Submit Completed Forms

Float Plans can be filed with a University employee with University responsibilities unless prior arrangements have been made with the office of DWS.

Float Plans filed with the DWS office can be closed during regular business hours by calling 328-4041.

It is extremely important to properly close all float plans so that a false emergency is not assumed.

Float Plan

Date of Operations _____

1. BOAT OPERATOR: Name _____

Home Phone: _____

Boat Cell Phone: _____

Other Phone: _____

2. Name of person whom you will be filing this float plan with:

Their phone number _____

3. Boat description: Make _____ Length: _____ ft.

Boat Name: _____ Color Hull: _____

Registration No: NC _____ P Engine Make: _____

Engine Size: _____ hp Onboard Fuel: _____ gal.

4. PERSONS ABOARD: (In addition to operator, continue on reverse if necessary)

Name and Tel. No

Name and Tel No.

1) _____

4) _____

2) _____

5) _____

3) _____

6) _____

5. TRIP EXPECTATIONS:

Departing at: _____ am/pm

from which Marina/Ramp/Location _____

Destination: _____

Time expected to return: _____ am/pm and

IN ANY CASE NOT LATER THAN: _____ am/pm

6. VEHICLE DESCRIPTION:

Make: _____ Model: _____ Color: _____

License No: _____ Parked at: _____

To holder of float plan: If operator does not return or call you by the **“IN ANY CASE NOT LATER THAN”** time listed above, contact someone at one of these emergency phone numbers:

ECU Boating & Marine Operations: Eric Diaddorio: Office (252) 744-1303 Cell (252) 916-5578

Michael Baker: Office (252) 744-1302 Cell (252) 916-5709

Director of Diving and Water Safety: Mark Keusenkothen: Office (252) 328-4041 Cell (252) 916-9599

Campus Police (252) 328-6787

Coast Guard Station Hoboken (Pamlico Area): Search and Rescue (252) 745-3131

Their alternate numbers: (252) 745-4000, (252) 745-3132

Coast Guard Station Fort Macon: Search and Rescue (252) 247-4583 or alternate (252) 247-4581

Coast Guard Station Ocracoke: Search and Rescue (252) 928-3711

Coast Guard station Hatteras: Search and Rescue (252) 986-2175

Coast Guard station Oregon Inlet: Search and Rescue (252) 441-1685

Coast Guard Station Elizabeth City: Search and Rescue (252) 355-6098

Coast Guard Station Wrightsville Beach: (910) 256-2615

Other:

Emergency

Communications:

Failure to properly use emergency procedures can result in property damage, injury or even death. It is imperative that you not only understand the procedures for declaring an emergency, but that you understand when to use them.

Experience has shown that the great majority of people are reluctant to call attention to them selves, even in the face of an emergency. In some cases, this reluctance has resulted in death. **The following situations are among those that require IMMEDIATE NOTIFICATION OF THE COAST GUARD.**

- **When the vessel has become disabled or there is reason to believe it is in the process of becoming disabled.**
- **When there is serious injury.**
- **When the vessel is likely to sink.**
- **When it becomes necessary to abandon ship.**

Radio Procedure:

In cases where the vessel has become disabled or may become disabled, but there is no immediate threat of danger or when there is a seriously injured person being transported, the Coast Guard should be notified on VHF Channel 16. Example: Fort Macon Coast Guard, this is the research vessel "Pirate". I am three miles east of Beaufort Inlet at GPS coordinates 7600.00N and 3500.00W. I have a problem with the bilge pump and I am taking on water. Please monitor my situation. Over/

Ask the Coast Guard to:

Please monitor your radio and the situation.

Relate to the Coast Guard:

Location
Nature of the problem
Name of the vessel
Degree of assistance needed
Description of vessel
Number of people aboard

Upon reply from the Coast Guard: Follow their orders.

In cases where the vessel is likely to sink or it becomes necessary to abandon ship, the international distress call "**MAYDAY**" should be broadcast over VHF Channel 16 three times followed by location, name of vessel and nature of problem. Upon reply, follow Coast Guard orders.

Example: MAYDAY, MAYDAY, MAYDAY. This is the vessel "Pirate." I am three miles east of Beaufort Inlet on GPS coordinates 7600.00N and 3500.00W. I am abandoning ship. (Repeat message 2 more times and wait for a reply.)

Statement of Agreement to Abide by the Policies in the ECU Boating Safety Manual

I, (print name) _____ have read and understand the policies and requirements contained in the ECU Boating Safety Manual. I agree to abide by the policies outlined in the manual.

SIGNATURE OF OPERATOR _____

SIGNATURE OF WITNESS _____

WITNESS (PRINT NAME) _____

DATE _____

EAST CAROLINA UNIVERSITY
Diving & Water Safety
Boating Activities under the auspices of ECU

UNCONDITIONAL AND FULL GENERAL RELEASE AND COVENANT NOT TO SUE

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE (H) _____

This is to be read and signed by all participants in East Carolina University's Diving & Water Safety Boating Activities (the "Activities"). PLEASE READ THIS CAREFULLY. IT AFFECTS CERTAIN RIGHTS YOU MAY HAVE IF YOU ARE INJURED OR OTHERWISE SUFFER DAMAGES PARTICIPATING IN THE ACTIVITIES.

In return for East Carolina University allowing me to participate in the Activities and other good and valuable consideration, I agree, and state, on behalf of myself, my heirs, assigns, executors and others, as follows:

1. I am eighteen (18) years of age or older and am competent to read and sign this "Unconditional and Full General Release and Covenant Not To Sue."
2. That I understand that I am participating in the Activities freely and voluntarily and the Activities are not required by East Carolina University.
3. That I am familiar with and will obey, any and all of the rules established for the Activities. I will also obey the ECU Student Code of Conduct, if applicable.
4. That I understand and appreciate the inherent risks and dangers of participating in the Activities (e.g., traveling, death, drowning, near drowning, serious neck and spinal injuries which may result in complete or partial paralysis, brain damage, serious injury to virtually all internal organs, serious injury to virtually all bones, joints, ligaments, muscles, tendons, and other aspects of the muscular skeletal system and serious injury or impairment to other aspects of my body, general health and well-being, etc.) which could result in property damage and/or personal injury, including death; and I agree to accept all risks whether present or future, known or unknown, arising from or as a result of my participation in these Activities.
5. That I WILL HOLD HARMLESS AND INDEMNIFY EAST CAROLINA UNIVERSITY and its officials, administrators, employees and all sponsors and individuals assisting in the Activities for any liability and all claims of damages, demands, and actions whatsoever in any manner resulting from my participation in these Activities.
6. I agree to assume all risks and costs related with these Activities.
7. That I understand I must be healthy and reasonably fit in order to safely participate in the Activities.
8. That in the event that I am rendered unable to communicate due to illness, accident, or emergency while participating in the Activities, I hereby give permission to a Physician selected by the Activities personnel to hospitalize, secure proper treatment for, and to take whatever medical actions are necessary to treat me.
9. That I have read and understand this "Unconditional and Full General Release and Covenant Not To Sue."

Participant Signature

Date

Full Name (Printed)

Spill Plan

TRANSFER CHECK-OFF LIST

INFORMATION FROM VESSEL/DEPARTMENT

Vessel/Department: _____ Date/Time: ____/____

Quantity: _____ gallons; number of trucks/barges: _____

Product: waste oil, marine diesel, JP5, other: _____

Transfer Date/Time: ____/____

Vendor's Name: _____

1. Has vessel been boomed? _____ Yes ___ No ___ N/A
 1. Have all hoses and connections to be used in the transfer been inspected? (Hoses should have Maximum Allowable Working Pressure (MAWP) and annual test dates marked on them)? _____ Yes ___ No ___ N/A
3. Are all the drainage scuppers on the pier side plugged with oil absorbent rags? _____ Yes ___ No ___ N/A
4. Has the appropriate pier side area for the transfer been plugged? _____ Yes ___ No ___ N/A
5. Are the vessel scuppers plugged 20 ft on either side of the transfer station? _____ Yes ___ No ___ N/A
6. Under each manifold or coupling connection is there 5-gallon capacity in case of spill? _____ Yes ___ No ___ N/A
7. Is there a contractor in charge of the pump operations? _____ Yes ___ No ___ N/A
8. Ensure that the contractor remains at the pump while transfer is on-going. _____ Yes ___ No ___ N/A
9. Is there adequate communications between the truck and the vessel? _____ Yes ___ No ___ N/A
10. After all areas have been checked return form to Hazardous Waste Shop and retain a copy for one year. _____ Yes ___ No ___ N/A
11. If a spill discharge occurs report according to the Emergency Phone Number list.

***NOTE:** Definition: Area to be plugged on the pier side must include the length of the transferring item (i.e., tank truck, buffalo, drum) plus 20 ft on either side of the transferring item on both sides of the pier where applicable.

Name of Person Completing Checklist

Unit

Signature

Date

Spill Plan (2)

Local Agency's Emergency Phone Numbers

Emergency	Call the campus police using any of the following: Emergency telephones located throughout the campus. Calling 9-1-1 from any East Campus phone. Call 252-328-6150 by cellular phone, pay phone, or non-campus phone. Call 911 in from any location and advise them of your situation.	
ECU Environmental Health And Safety		328-6166
ECU Marine Dock Master		744-1302 / 252-916-5709
ECU Research Vessel Captain		744-1303 / 252-916-5578
ECU Diving & Water Safety (Director)		328-4041 / 252-916-9595
ECU Diving & Water Safety (Diving Safety Officer)		328-4041 / 252-916-9599
Pitt County Emergency Management		830-6345
Beaufort County Emergency Management		946-2046
Beaufort County Sheriff Department		946-7111
Carteret County Sheriff Department		504-4800
Greenville Fire & Rescue		329-4390
Greenville Police		830-3937
Pitt County Sheriff's Office		830-4142
North Carolina Highway Patrol		441-6127
Washington Police Department		946-1444
Washington Fire Department		946-1444
Morehead Police Department		726-3131
Morehead Fire Department		726-3131
Atlantic Beach Police Department		726-2523
Atlantic Beach Fire and Rescue		726-7361
U.S. Coast Guard Search and Rescue		247-4545

EAST CAROLINA UNIVERSITY
SPILL RESPONSE CHECKLIST
 FOR
EMERGENCY COORDINATOR (EC)

1. **RESOURCES:**

a. **Important phone numbers:**

- Environmental Health and Safety (252) 328-6166
- After hours call ECU Police at 328-6150
- ECU Dock Master (252) 744-1302 (O) (252) 916-5709 (C)
- ECU Research Vessel Captain (252) 744-1303 (O) (252) 916-5578 (C)
- ECU Diving & Water Safety (252) 328-4041 (O) (252) 916-9595 (C)
- National Response Center(800) 424-8802 (Washington, DC)
- ECU Police (252) 328-6150
- Fire Department911

b. **Spill response equipment:** The Marine Dock Master should provide Spill Response equipment to vessel operators when checking out the vessel. Spill kits are to be used for spills only.

c. **Contractors for spill clean-up:**

- INCO, INC. (252) 446-1174
- Clean East Environmental Inc. (252) 939-1600

d. **General:**

Use Common sense. Use the minimum amount of resources to get the job done, but get it done completely. The following checklist items are progressive and not necessarily warranted in every situation.

2. **SPILL CONTAINMENT:**

YES NO

(a) - **Minor Spill (0-5 gallons)**

- Inform Unit that you are Emergency Coordinator (EC). _____
- Ensure response personnel have proper Personal Protective Equipment (PPE). _____
- Eliminate all ignition sources. _____
- Contain spill with socks/clay in pre-staged spill kit. _____
- Threat to sanitary sewer infiltration? _____
- Apply absorbent if breached; notify Fire Dept. of breach and your location.
- Threat to potable water lines? _____
- Call local Fire Department at your location.
- Threat to storm drain? _____
- Cover with rubber bladder and absorbent.
- Call EH&S to report spill. _____
- Call ECU Dock Master to report spill. _____

(b) - Intermediate Spill (5-100 gallons)

- Contact local fire department. _____
- Dispatch personnel for additional equipment (your cost) _____
- Deploy small boat with BOOM _____
- Contact local fire department. _____
- Contact ECU Dock Master. _____
- Clear area of non-essential personnel _____
- Establish communications with Responding Agencies _____
- Maintain perimeter _____
- Stage personnel with fire extinguishers _____
- Do not allow open flames in area _____
- Call EH&S/ to report spill. _____

(c) - Major Spill (100-5000 gallons)

- Call ECU EH&S _____
- EH&S to contact NCDENR _____
- Contact ECU Dock Master. _____
- Provide information and support as requested _____

3. SPILL CLEAN-UP (PROGRESSIVE):

(a) - Minor and Intermediate (1-10 gallons)

- Recover all spill possible using pre-staged absorbents _____
- Drum all recovered oil, absorbents, and contaminated soils _____
and properly label for disposal _____
- Dispose of spill materials through EH&S. _____

(b) - Major Spills (10- or more gallons)

- Contact Industrial Marine Service vendor for immediate _____
clean-up assistance or Dock Master to arrange response _____
- Contact local fire department. _____
- Contact ECU EH&S or ECU Police _____

4. NOTIFICATIONS/SPILL RESPONSE RECORD:

(a) - Ensure Unit makes proper National Response Center (NRC)

- notifications IAW SPCC _____
- Ensure EH&S has notified NCDENR. _____

(b) - Direct Unit to complete and submit Spill Response Record

- to Environmental Health and Safety IAW SPCC _____

5. CRITIQUE:

Was this SPCC procedure completely effective? Was oil recovered to the extent possible? Are there recommended improvements to the SPCC Plan or procedures?

EAST CAROLINA UNIVERSITY SPILL RESPONSE RECORD

1. Name of Unit responsible for spill: _____

2. Immediate Notification:

- a. Notification to Marine Dock Master Date/Time _____/_____/_____
- b. Notification to EH&S Date/Time _____/_____/_____

3. Spill Characterizations:

- a. When did the spill occur? Date/Time _____/_____/_____
- b. What spilled? _____waste oil _____marine diesel
_____gas _____diesel
_____heating fuel _____other
- c. Estimated quantity spilled? _____gallons.
- d. Location of spill? (specific pier, wharf or storage tank location) _____

- e. Size of area affected? _____(square feet)
_____pavement _____soil _____water
Cause of spill _____

- f. Actions to contain/clean-up spill? _____

- g. Quantity recovered? _____gallons.

4. After-Action Notification:

- a. Notification to National Response Center (1-800-424-8802): Date/Time _____/_____/_____
- b. Notification to NCDENR (1-800-858-0368) Date/Time _____/_____/_____

5. After action items to correct cause of spill? _____

6. Signature of Unit Representative: _____
Name/Title Date

“Oil Spill Response Kits”

All vessels of the ECU Marine Fleet will carry a “Spill Response Kit”. This kit will be checked out from the Marine Dock Master when removing a vessel for use. It is the responsibility of the researcher to insure that the kit is complete and readily available when fueling procedures are being accomplished and any time the vessel is on water.

“Spill Response Kit” for small vessels

5 – Oil absorbent pads (MAT203 from the Pigalog)

2-gallon bag – Oil Dry (PLP213-1 from the Pigalog)

“Spill Response Kit” for vessels receiving fuel in excess of 55 gallons away from “controlled marina”

10 – Oil absorbent pads (MAT203 from the Pigalog)

2 -2 gallon bags – Oil Dry (PLP213-1 from the Pigalog)

36 feet – Floating containment boom (BOM407 from Pigalog)

Secondary containment system for 55-gallon drum (If transfer is from same) (DRM369 from Pigalog)

Definitions/Acronyms

Accident – An accident is an incident requiring medical attention beyond simple first aid or any damage to non-University property or damage to University property beyond normal “wear and tear”.

DWS – Diving and Water Safety

Inland operations - The vessel is operating in a closed body of water.

Inshore operations - The vessel is operating fifteen nautical miles (nm) or less from shore.

Licensed captain - Possession of a valid US Coast Guard license or equivalent.

MOCC – Motorboat Operator Certification Course

Offshore operations - The vessel is operating beyond fifteen nm from shore.

Operator – Has met the ECU requirements for operation certification. This individual has ultimate responsibility for the safety of the vessel and those aboard regardless of whether he or she is physically manning the helm.

ORV – Oceanographic Research Vessel