Spill Prevention, Control, and Countermeasure Plan

Harbor Branch Oceanographic Institute

WEB VERSION

Environmental Health and Safety
Florida Atlantic University
5600 US 1 North
Fort Pierce, FL 34946
Phone: 772-242-2358
Fax: 772-461-1937
Email: ehs@fau.edu
Web: www.fau.edu/ehs

November 2013

This document has been prepared per the requirements of 40 CFR 112 – Oil Pollution Prevention, with observance to all subsequent, applicable amendments.

NOTICE: Copies of this publication can be obtained in an alternate format by contacting Environmental Health & Safety at ehs@fau.edu or 561-297-3129. This publication is available in standard print, Braille, or electronically for people with disabilities. Please allow at least 10 days to process this request.

TABLE OF CONTENTS

1 Introduction

1.1 Purpose

This Spill Prevention, Control, and Countermeasure (SPCC) plan was prepared by Florida Atlantic University (FAU) for FAU's Harbor Branch Oceanographic Institute (HBOI), located at 5600 US 1 North, Fort Pierce, FL 34946. The primary purpose of this SPCC is to establish HBOI's procedures, methods, equipment, and other requirements to prevent the discharge of oil into or upon the navigable waters of the United States. Should a spill or release of oil occur, this SPCC also provides guidance to help minimize negative impacts to human health and the environment and streamline response and recovery efforts.

This Plan has been prepared to satisfy the requirements of Title 40, Code of Federal Regulations, Part 112 – Oil Pollution Prevention (40 CFR Part 112) as well as all applicable requirements specified in subsequent amendments to this regulation, issued through November 2009.

The term "oil", as used throughout this SPCC, is broadly defined as oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Note: Since the requirements of §112.8 and §112.12 are comparable, FAU will apply the same standards, protective measures, and release response methodology observed for petroleum-based oil to bulk containers of plant and animal oils (i.e. used cooking oils) as well. Note: At the time of writing of this SPCC, HBOI was only using small (<< 55 gallons) food oil containers for the storage of new and waste food oil.

1.2 Applicability

The regulations apply to facilities engaged in the production, storage and/or use of oil, if those facilities could reasonably be expected to discharge oil into or upon the navigable waters of the United States in quantities that may be harmful. Such a discharge would violate applicable water quality standards, cause a surface sheen on or discoloration of navigable waters or adjoining shorelines, or cause sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The regulations provide an exemption for facilities whose underground oil storage capacity is 42,000 gallons or less and whose aboveground oil storage capacity does not exceed 1,320 gallons. However, HBOI's aboveground storage capacity exceeds 1,320 gallons, thus the University is required to comply with applicable portions of the regulations. Diesel fuel storage accounts for the majority of the total. Oil is also stored in transformers, switches, pumps, compressors and other mechanical or electrical equipment. Additionally, used cooking oil and used motor oil are collected for recycling.

This SPCC plan is applicable for all university operations that involve the storage, transfer, or use of oil that may potentially result in discharge under both normal working conditions or during an emergency situation. Note: The term "facility" is used generically throughout this SPCC and refers to the HBOI campus in its entirety, unless otherwise noted.

1.3 Standards of Preparation & P.E. Certification

This written SPCC Plan has been prepared in accordance with good engineering practices and in the sequence required by the regulations. Required procedures or information have been placed, as needed, in appendices to this plan.

This plan has been reviewed and certified by a licensed Professional Engineer (P.E.). A copy of the P.E. certification is included in Appendix A.

1.4 Plan Administration

1.4.1 Availability & Location

The HBOI SPCC Plan and all supporting documents are maintained by Environmental Health and Safety. The SPCC Plan is available to University departments and employees as well as the general public via the Environmental Health and Safety web site (www.fau.edu/ehs), though, in the interest of security, some sensitive information is not presented on the web site. The plan, in its entirety, is available for on-site review at the Environmental Health and Safety office, located in the Biomedical Marine Research Building (HB16).

1.4.2 Amendment & Review

1.4.2.1 Amendment of SPCC Plan by Regional Administrator

If HBOI discharges more than 1,000 gallons of oil in a single discharge, or discharges more than 42 gallons of oil in each of two discharges occurring within any twelve month period, FAU will submit the information required by §112.4(a) of the regulations to the EPA Regional Administrator.

If after review of the information submitted by FAU, the Regional Administrator finds that the Plan does not meet the requirements of the regulations or that amendment is necessary to prevent and contain discharges from HBOI, the Regional Administrator may require the University to amend this Plan. If the Regional Administrator proposes that the Plan be amended, FAU will, within 30 days, either amend the Plan and implement the amended Plan or appeal the decision. If FAU chooses to amend the Plan, the Plan will be amended within 30 days and implemented as soon as possible but no later than six months after the amendment. If FAU appeals the decision, the Regional Administrator must notify FAU of his decision within 60 days of receiving the appeal.

1.4.2.2 Amendment of SPCC Plan by Owners or Operators

FAU will amend this Plan when there is a change in facility design, construction, operation, or maintenance that materially affects its potential for a discharge. Examples of changes that may require amendment of the Plan include, but are not limited to:

- Commissioning or decommissioning containers;
- Replacement, reconstruction, or movement of containers;
- Reconstruction, replacement, or installation of piping systems;
- Construction or demolition that might alter secondary containment structures;
- Changes of product or service; or

- Revision of standard operation or maintenance procedures at a facility.

An amendment made under this section will be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

1.4.2.3 Five-Year Review and Evaluation

FAU will review and evaluate its SPCC Plan at least once every five years. As a result of this review and evaluation, FAU will amend its SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge.

1.4.2.4 Amendment Implementation and Documentation

FAU will implement any amendment as soon as possible, but not later than six months following preparation of any amendment. FAU will document completion of the review and evaluation, and sign a statement as to whether the Plan will be amended. FAU will have a Professional Engineer certify any technical amendments to this Plan. The form used to document that review and evaluation for amendment has been completed is provided in Appendix B, along with an amendment log sheet.

1.5 Responsibility

The Director of Environmental Health and Safety and the University's Environmental Program Coordinator are responsible for developing and maintaining this SPCC, and for making sure that the plan is available to the EPA Regional Administrator for on-site review.

1.6 Management Approval

This SPCC has the full approval of management at a level of authority needed to commit the necessary resources required to fully implement the plan in the unlikely event of a discharge of oil into or upon the navigable waters of the United States.

This SPCC has been approved by the University's Director of Environmental Health and Safety. A signed confirmation of management approval is included in Appendix C.

1.7 Conformance with Requirements

1.7.1 Cross Reference with SPCC Provisions

Table 1.7.1-A cross references the sections of the FAU SPCC to applicable parts of 40 CFR Part 112.

Table 1-1 Cross Reference with SPCC Provisions

Applicable Section of 40 CFR 112	Description	Location in SPCC
112.1	Applicability	Section 1.2
112.3(d)	Professional Engineer Certification	Section 1.3 & Appendix A
112.3(e)	Availability and Location	Section 1.4.1
112.4	Amendment of SPCC Plan by Regional Administrator	Section 1.4.2.1

112.5	Amendment of SPCC Plan by Owners or Operators	Section 1.4.2.2
112.5(b)	Five-Year Review & Evaluation	Section 1.4.2.3 & Appendix B
112.7	Management Approval	Section 1.6 & Appendix C
112.7	Cross Reference with SPCC Provisions	Section 1.7.1
112.7	Facilities, Procedures, Methods or Equipment Not Yet Operational	Section 1.7.2 & Appendix D
112.7 (a)(1)	Conformance with Requirements	Section 1.7.3, 1.8 & Appendix E
112.7(a)(3)	General facility information	Section 2.1 - 2.4 & Appendix F
112.7(a)(3)	Facility site plan	Section 2.5 & Appendix G
112.7(a)(3)	Facility diagram	Section 2.6 & Appendix H
112.7(a)(4)	Discharge notification	Section 3 & Appendix I
112.7(a)(5)	Discharge response	Section 4
112.7(b)	Potential discharge volumes and direction of flow	Section 5
112.7(c)	Containment and diversionary structures	Section 6
112.7(d)	Practicability of secondary containment	Section 7
112.7(e)	Inspections, tests and records	Section 8
112.7(f)	Personnel training, and discharge prevention procedures	Section 9
112.7(g)	Security	Section 10
112.8.b	Facility drainage	Section 11
112.8(c)(1-5)	Bulk Storage Containers / Secondary Containment	Section 12
112.8(c)(6)	Inspections	Section 13 & Appendix J
112.8(c)(7)	Leakage control	Section 14
112.8(c)(8)	Overfill prevention system	Section 15
112.8(c)(9)	Effluent treatment facilities	Section 16
112.8(c)(10)	Visible discharges	Section 17
112.8(c)(11)	Mobile and portable containers	Section 18
112.8(d)	Transfer operations, pumping, and in-plant processes	Section 19
112.12	Requirements for Animal Fats and Oils and Greases for Onshore Facilities	Same as SPCC procedures for petroleum oil.

1.7.2 Facilities, Procedures, Methods or Equipment Not Yet Operational

Additional facilities or procedures, methods, or equipment not yet fully operational at the time of execution of this SPCC, are discussed in Appendix D. The details of installation and operational start-up are discussed, as are conformance with the requirements listed §112.7.

1.7.3 Overview of Applicable Sections of the Rule & Amendments

The preparation of this SPCC Plan included a comprehensive review of the regulations (40 CFR Part 112) and Amendments from December 2006, December 2008, and November 2009 to determine which subparts and sections apply to FAU operations.

The review indicated that FAU must comply with applicable requirements in Subpart A, §112.1 through §112.7. Additionally, FAU must comply with applicable requirements in Subpart B, §112.8, and Subpart C, §112.12.

Taken in its entirety, this Plan and its supporting documents address all applicable requirements. If FAU operations change to the extent that additional sections become applicable, FAU will amend this plan and implement the amended plan as required.

1.8 Certification of Applicability of the Substantial Harm Criteria Checklist

Per the requirements of Section 112.20(e) of the facility response plan regulations, as a facility regulated by 40 CFR Part 112, FAU must complete Appendix C to Part 112 – Substantial Harm Criteria. This initial screening is used to determine whether the University is required to develop a facility response plan.

Based on the results of the initial screening, at the time of execution of this SPCC, HBOI was not required to submit a facility response plan. Results of the screening are included in Appendix E of this SPCC.

2 General Facility Information, Site Plan, and Facility Diagram

2.1 Facility Owner and Operator Information

The facility owner name, address, and telephone number is as follows:

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

The facility operator name, address, and telephone number is as follows:

Florida Atlantic University, Harbor Branch
5600 US 1 North
Fort Pierce, FL 34946

2.2 Facility Contacts

Facility contacts for this SPCC are presented in Table 2.2.1 below. These contacts shall be notified immediately in the event of an oil spill or discharge.

Table 2-1 Facility Contact Information

Name	Title	Mobile Phone	Office Phone
Thomas Bradley	Director, EH&S	561-239-4202	561-297-3106
Thomas Tomascik, P.E.	SPCC Coordinator	561-414-3224	561-297-2385
Dennis Zabel	Associate Director, EH&S	561-239-4199	772-242-2358

2.3 Facility Description

Florida Atlantic University's Harbor Branch Campus is located at 5600 US 1 North, Fort Pierce, Florida 34946. The campus is located north of the Fort Pierce city center, in St. Lucie County, at approximate coordinates of: 27.534570, -80.357351.

Since 1971, the shared vision of founder J. Seward Johnson, Sr., and inventor Edwin A. Link to explore, protect and wisely use the oceans' resources has shaped the work at Harbor Branch Oceanographic Institute. Today, articulated as Ocean Science for a Better World®, this same vision drives more than 160 Harbor Branch scientists, engineers and support staff to be leaders in ocean-related innovation, exploration, research, education and conservation. In 2008, FAU merged with the Harbor Branch Oceanographic Institution, a leader in marine science and related fields.

HBOI is involved in research and education in the marine sciences; biological, chemical, and environmental sciences; marine biomedical sciences; marine mammal conservation; aquaculture; and ocean engineering.

HBOI is located on approximately 500 acres, adjacent to the Indian River. The campus consists of over a dozen academic facilities, and includes residential facilities and a dining hall. The site is bordered by the Indian River to the East, agricultural properties to the North, conservation properties to the South, and interspersed residential and commercial properties to the West.

2.4 Facility Oil Storage

HBOI stores oil for use in emergency generators and in support of a variety of facility operations. HBOI also has oil-containing equipment located throughout the facility. The locations where oil is either stored or contained in equipment in quantities of 55 gallons or greater are summarized in Appendix F.

The majority of the facility's oil storage falls into one of the following categories:

- Diesel storage for emergency generators
- Unleaded gasoline and ultra-low sulfur diesel storage for vehicle use
- Small quantities of used oil collected from maintenance activities
- Hydraulic oil contained in elevators

All of the FAU-owned transformers on the Harbor Branch campus are of the dry type, containing no mineral oil, and thus are exempt from this SPCC.

Harbor purchases cooking oil in small containers and reuses these containers for waste oil accumulation. There is no bulk storage of food oil at HBOI in large enough containers to warrant coverage under this SPCC.

The facility no longer has underground diesel or gasoline storage tanks. There are seven aboveground and seven underground LPG tanks, at various locations across the HBOI campus, which provide fuel for greenhouse heating and emergency generators. These tanks are not covered under this SPCC since natural gas (including liquid natural gas and liquid petroleum gas) is not considered oil. Note: EPA does not consider highly volatile liquids that volatilize on contact with air or water, such as liquid natural gas or liquid petroleum gas, to be oil (67 FR 47076).

2.5 Site Plan

The site plan for Florida Atlantic University's Harbor Branch Campus is provided in Appendix G. This site plan shows the full extent of HBOI and also references the campus's location in the state and in proximity to major area roadways.

A small portion of the campus, located in the middle of the southern half of the site, is not owned or operated by FAU. This area is shown in a yellow rectangle on the site plan. Operations in this area are not included in this SPCC.

2.6 Facility Diagram

A facility diagram that indicates the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located is provided in Appendix H.

2.7 Drainage Pathway and Proximity to Navigable Waters

Stormwater from HBOI primarily flows to drainage ditches, canals, low-lying retention areas, and stormwater drains. The topography of the campus is generally flat, with slight-to-moderate, localized, surface elevation variations in proximity to buildings, landscaping, and paved areas.

The Intracoastal Waterway runs along the entire eastern perimeter of the campus. In some localized areas along the Intracoastal shoreline, there exists a slight to moderate slope towards the waterway. The jetty leading from the central portion of the campus to the Intracoastal has been partially lined with construction debris and is occasionally leveled with a bulldozer which helps to curtail runoff in this area. The facility diagram, provided in Appendix H, provides additional surface flow information.

The university's storage tanks, bulk containers, machinery, hydraulic elevators, and other oil-containing equipment are not typically located near floor drains that empty into the storm sewer. In some cases, storage tanks are located in areas that have pathways that may eventually reach storm sewers or the canal in the event of a slow, prolonged or sudden, catastrophic release; however, historically, these have proven to be unlikely failure scenarios.

Data sheets for each of the university's regulated storage tanks are included in Appendix J of this SPCC. These sheets describe the ground surface features adjacent to the tanks, including topographical information and distance and direction to nearby storm drains. Note: All dimensions provided on the data sheets are approximate.

2.8 Facility Spill History

FAU's HBOI campus has not had any spill events in the past five years in excess of 42 gallons of oil. Vehicle accidents on campus have occasionally resulted in small spills, generally a few quarts in magnitude, to impermeable road surfaces. In all of these cases, the spills were cleaned up immediately and there were not discharges to the environment. Waste from cleanup activities was properly disposed by the University's hazardous waste disposal vendor.

3 Discharge Notification

3.1 Notification Responsibility

The person discovering a release of oil from a container, tank or operating equipment must initiate certain actions immediately, which include reporting the release. Notification requirements vary depending on the nature of the spill and whether the spill has resulted in fire or injury.

3.2 Spills That Do Not Require Notification

Incidental spills of oil may be immediately cleaned up by FAU personnel if the following conditions are met:

1. The spill has not resulted in a release to the environment, which includes but is not limited to permeable ground, drainage areas, surface water, drains, and sewers;
2. The spill poses no threat to human health, and is not a fire or explosion hazard;
3. Appropriate spill response materials are readily available (spill kits or other absorbent materials);
4. Those involved with the cleanup have, and understand how to use, appropriate personal protective equipment (PPE);
5. Those involved with the cleanup are familiar with the hazards posed by the spilled material;
6. The spill is limited in size (no more than a few gallons), readily stoppable, and easily contained.

Spills that meet the criteria described above do not require notification to EH&S or any additional external notifications.

Waste from an incidental spill, including any contaminated debris, from cleanup should be containerized, labeled and staged in secondary containment. EH&S may be contacted if assistance is required during small spill cleanup or afterward for assistance in preventing recurrence of the incident.

Contact EH&S at 6-2357 or place a hazardous waste pickup request through the EHS&S website at http://www.fau.edu/facilities/ehs/new-waste-form.php to have waste from spill cleanup collected for proper disposal.

3.3 Spills That Require Initial Notification

For spills that do not meet the conditions of the previous section, initial notification requirements depend on whether or not the spill has resulted in fire or injury:

- **Call 911** For spills or exposures, which result in *fires and/or injuries that require urgent medical attention*, i.e. a rescue squad needs to be dispatched to the scene.

- **Call 6-2357** For spills or exposures *without fires or injuries or with injuries that do not require urgent medical attention*. Note: After hours and on weekends/holidays, call University Police at (772) 216-1124, who will then contact EH&S.

Contact EH&S at 6-2357, immediately after 911 has been called, so that EH&S can be apprised of the situation and can provide assistance with response efforts.

When contacting EH&S, the following information must be provided:

- Your name and the incident location
- Details of the incident including:
    - Type of incident, liquid spill, gas leak, etc.;
    - Type and quantity of hazardous material involved, if known;
    - Type of exposure to personnel, skin or eye contact, inhalation, etc.;
    - Extent of injuries or damage, if any.

In all cases, take the following actions:

- Evacuate the immediate area, or the entire building, if necessary by pulling the fire alarm.
- Keep others out of the area.
- If safe to do so, assist others to safety.

3.4 External Agency Notification

The SPCC Coordinator shall determine if a reportable spill has occurred and shall make required notifications and reports by telephone, and in writing, to the appropriate agencies as soon as practicable, and within any deadlines for such notifications and reports. Table 3.4-1 provides useful contact numbers for agency notification.

Table 3-1 Federal, State & Local Emergency Contact Numbers

Agency	Phone Number
Danger to Life or Health:	
HBOI Police (24 hr)	911 *or* (772) 216-1124
St. Lucie County Fire District (24 hr)	911
Immediate Notification Required:	

State Watch Office (24 hr)	(800) 320-0519
National Response Center (24 hr)	(800) 424-8802 *or* (202) 267-2675
Alternate Immediate Contacts:	
U.S. EPA Region IV Spill Reporting Center (24 hr)	(404) 562-8700
U.S. Coast Guard, Region 7, Sector Miami (24 hr)	(305) 535-4472 *or* (305) 535-4520
Subsequent Communications:	
St. Lucie County Emergency Management	(772) 462-8110
DEP Southeast District	(561) 681-6600
DEP Tallahassee Waste Cleanup Section	(850) 245-8927
DEP Tallahassee Division of Emergency Management	(850) 413-9969
District 10, Treasure Coast Regional Planning Council (LEPC)	(772) 221-4060

3.4.1 Notification Criteria

The need to make external notification is triggered by a discharge that results in any of the following:

1. A violation of state water quality standards
2. Visible film or sheen on the water's surface (known as the "sheen rule")
3. Sludge or emulsion deposited below the water's surface
4. Release of greater than 25 gallons (or potential > 25 gallons) to any surface
5. Response efforts that require additional state or federal assistance.

3.4.2 Whom to Notify

For spills that meet the notification criteria described in the previous section, a notification hierarchy is generally observed. At the federal level, the National Response Center (NRC) serves as a clearinghouse for all of the states. Once notified, the NRC contacts the state's State Watch Office (SWO), who in turn contacts the district office of the state's environmental protection agency (Florida Department of Environmental Protection). Other agencies/entities, such as the Coast Guard may also be notified by any of the aforementioned entities in the event a larger scale offshore response is warranted.

Ideally, one call to the NRC should set the chain of proper notifications in motion. Practically, it is up to the SPCC coordinator to make certain the NRC, SWO, and DEP are all properly notified.

3.4.2.1 The National Response Center

Oil discharges that meet any of the notification criteria shall be immediately reported by the SPCC Coordinator to the National Response Center (NRC). The NRC is the federal government's centralized reporting center, which is staffed 24 hours a day by U.S. Coast Guard personnel. If, for any reason, reporting directly to the NRC is not possible, initial notification can be made to the EPA in Region IV or to the U.S. Coast Guard Marine Safety Office in Region 7.

3.4.2.2 The State Watch Office

The Florida State Watch Office (formerly known as the State Warning Point) must also be immediately notified for any spills that meet the notification criteria, or for any spills that otherwise pose an immediate threat to human health or the environment.

3.4.2.3 The Florida Department of Environmental Protection

The SPCC Coordinator must notify the DEP in writing within 24 hours of the discovery of a discharge, or before the close of the next business day of any release that meets the notification criteria. An initial phone call is not immediately required.

Notification shall be made using the Florida Department of Environmental Protection's "Discharge Reporting Form", included in Appendix I.

3.4.3 What Information to Include

When initially reporting a release to the NRC or SWO, the SPCC Coordinator will provide all available, pertinent details about the release, including but not limited to the following:

1. The exact address or location and phone number of the facility;
2. The date and time of the discharge;
3. The type of material discharged;
4. Estimates of the total quantity discharged;
5. The source of the discharge;
6. A description of all affected media;
7. The cause of the discharge;
8. Any damages or injuries caused by the discharge;
9. Actions being used to stop, remove, and mitigate the effects of the discharge;
10. Whether an evacuation may be needed;
11. The names of individuals and/or organizations who have also been contacted;
12. Number and types of injuries (if any);
13. Weather conditions at the incident location;
14. Other information of use to emergency responders; such as, names of responsible parties, vehicle/tanker information (if applicable), and property damage estimates.

3.4.4 Where to Find Additional Assistance

If the spill cleanup is beyond the capabilities of FAU personnel, the SPCC Coordinator will request the assistance of qualified spill response, clean-up, and remediation contractors. Contact information for oil spill response coordinators is provided in Table 3.4-2.

Table 3-2 Oil Spill Response Contractors

Contractor	Phone Number
Triumvirate Environmental* (24 hr)	(800) 966-9282
Clean Harbors - Miramar, FL (24 hr)	(800) 645-8265
SWS Environmental Services - Fort Lauderdale, FL (24 hr)	(877) 742-4215
CDI Group USA - Fort Pierce, FL	(772) 467-0270

***** *Triumvirate Environmental handles most of FAU's hazardous waste disposal needs, and can be called upon to respond to hazardous material releases, including discharges of oil. Other turnkey response contractors are listed in the event additional response capabilities are required. Both additional contractors have land and sea-based oil cleanup capabilities.*

4 Discharge Response

4.1 Discovery of a Release

The person discovering a release of oil or a hazardous substance from a container, tank or operating equipment should initiate certain actions immediately.

4.1.1 Initial Response Actions

The following initial response actions should be taken by the discoverer of an oil release, as long as there is no immediate danger to the life and health of the responder posed by the release:

- Extinguish any sources of ignition. Until the material is determined to be non-flammable and non-combustible, all potential sources of ignition in the area should be turned off. Avoid creating sparks or static electricity – do not unplug or turn off electrical equipment or lights.
- Report the release (See Section 3 of this SPCC).
- Evacuate the immediate area, or the entire building, if necessary by pulling the fire alarm.
- Keep others out of the area.
- If safe to do so, assist others to safety.
- Identify the material released.
    - Consult the Material Safety Data Sheet (MSDS) for the product, which provides information on physical, and health hazards, first aid measures, and what to do in the event of a spill or release. MSDSs are available through FAU EH&S.
- Attempt to stop the release at its source. If it is safe to do so, simple measures such as closing a valve, pushing an emergency stop button, or up righting/rotating a container to prevent further release of the material can be attempted. Assure that no danger to human health exists first.

4.1.2 Containment of a Release

If oil or a hazardous substance is released to the environment, it is crucial that the material be contained as quickly as possible. The following actions may be taken by appropriately trained and equipped personnel at the University or from outside organizations:

1. **Stop the release at the source**. If the source of the release has not been previously found and stopped, EH&S and/or the St. Lucie County Fire District Special Operations/Hazardous Materials Response Team, will determine, if special protective equipment is necessary to approach the release area, or if assistance is required to stop the release.

2. **Contain the material released into the environment**. Following proper safety procedures, the spill should be contained using appropriate spill materials such as absorbent pads & socks, non-sparking tools, storm drain covers, plastic sheeting, etc.

   See Table 4-1 below for a list of the typical spill response equipment that is available at HBOI. Spill response materials are primarily located in the Marine Science Building (HB1, Room 127) and in the BMR East Building (HB16, Room 111). EH&S also maintains a large mobile spill kit that is available for immediate response to smaller-scale spills or leaks. The content list for this kit is provided in Table 4-2 below.

   These materials are available for immediate mobilization to anywhere on campus and can be transported via golf cart or pickup truck, depending on the size and characteristics of the release.

   If a release occurs from a tank that is located in close proximity to a storm drain (see Appendix J for tank-specific information), the drain must be bermed or blocked off as part of initial containment efforts. This can be done by completely surrounding the drain with impermeable material, or by covering the drain with a liquid tight cover.

   Note: Additional supplies might also be available for any given response; the items in the tables should be considered the minimum amount on hand at any time. Supplies such as oil dry, sand bags, shovels, and brooms may also be available in the Facilities Building (HB27).

3. **Recover or clean up the material spilled**. As much material as possible should be recovered and reused when possible. Material which cannot be reused must be properly containerized, labeled, and disposed of properly. Every effort should be made to prevent the mixing of hazardous and non-hazardous materials in order to reduce disposal costs.

4. **Decontaminate tools and equipment used in cleanup**. Even if tools and equipment are dedicated only to cleanup efforts, they must be decontaminated before replacing them in the spill control kit. Wastes generated from decontamination efforts must be disposed of properly along with the wastes generated from the spill cleanup.

5. **Arrange for proper disposal of any waste material**. The waste material from the cleanup and decontamination of tools and equipment must be subjected to a hazardous waste determination by FAU EH&S. Representative sampling and analysis may be necessary to make this determination. The waste must be transported and disposed of in compliance with all applicable laws and regulations.

Table 4-1 Spill Response Equipment and Supplies

Location	Physical Description	Capabilities
HB1 127	Tyvek chemical resistance coveralls	protect body from minor chemical hazards
HB1 127 HB16 111	Safety Goggles	protect eyes from chemical splashes
HB1 127	Air-purifying respirators ½ & full-face	protection from airborne respiratory hazards
HB1 127	Various types of respirator cartridges	dusts fumes mists, organic vapor/acid gas, etc.
HB16 111	Nitrile/neoprene gloves	protect hands from chemical exposures
HB16 111	Clay Absorbent (i.e.Oil-Dry, Kitty Litter)	absorbent for organic solvents, oil spills
HB1 127 HB16 111	Spill control polysorb pillows	all purpose (except Hydrofluoric Acid)
HB1 127 HB16 111	Vermiculite	drum packing material, chemical absorption
HB1 127 HB16 111 Golf Cart 1	Absorbent pads/ paper	absorb radioactive/biohazardous spills
Golf Cart 1	Sodium Bicarbonate	neutralizes acid (base) spills
HB16 111	Sodium Hypochlorite (bleach)	disinfectant for biohazardous spills
Golf Cart 1	Radiac-wash or equivalent	radioactive decontamination of smooth surfaces
HB16	Brooms, brushes, & dust pans	clean up spilled solids.
HB1 127 HB16 111	Drums, buckets, jugs, totes	containerize wastes for disposal
HB1 127 HB16 111	Polyethylene bags	collect and dispose waste
HB1 127 HB16 111	Impermeable red biomedical waste bags	dispose biomedical waste
HB1 127 HB16 111	Duct tape	seal spill waste in bag
HB16 109	ABC & CO2 Fire extinguishers	fight small fires
HB1 127 HB15 HB16	Eyewash & Safety Shower	irrigate eyes/drench body upon chemical exposure
HB1 127 HB16 111	Nextel direct connect cell phones	emergency communications
HB1 127 HB16 111	Building fire alarm system	Notify building occupants to evacuate building

Table 4-2 Mobile Spill Kit Contents

Qty	Description
Absorbents	
1 roll	Paper towels
20	Spill Pads (12" x 12")
4	Spill Socks (4')
2.5 lb	Sodium bicarbonate
2.5 lb	Citric acid
8 lb	Floor Dry
1 lb	Formalin Spill Control
Containers	
6	Trash Bags (55 gallon)
6	Clear Bags (15 gallon)
1 dozen	Ziploc bags (1 gallon)
1 dozen	Ziploc bags (1 quart)
1 dozen	Wire tie closures
3	Red bio bags (37" x 48")
3	Red bio bags (25" x 35")
1	Sharps container (1 quart)
1 roll	Duct tape
1 roll	Masking tape
1 roll	Red Danger tape
1	Plastic tote (large)
Diagnostic Tools	
1	DOT Emergency Response Guidebook
1	NIOSH Pocket Guide to Chemical Hazards
1 box	pH test strips

Qty	Description
PPE	
1 box	Nitrile gloves (large)
2 pair	Chemical resistant gloves (large)
2 pair	Goggles (unvented)
2	Tyvek suits (xx large)
5 pair	Booties
Material Handling	
1	Tong or forceps (medium - 6")
1	Dustpan
1	Brush
Disinfectants	
16 oz	Steris Staphene aerosol spray
8 oz	Instant hand sanitizer
First Aid	
1	First aid kit (small)
32 oz	Eyewash bottle/solution
	General Supplies
1	Clipboard
1	Notebook
1	Copy of Chem Response Guide
1	Copy of MSDS
1	Permanent maker (Sharpie)
1	Pen
1	Flashlight
1	Safety Scissors

4.1.3 Debriefing and Review of the SPCC Plan

As soon as possible, after the release has been cleaned up, appropriate personnel from the University and any outside agencies or contractors involved shall meet to review spill response efforts. Where deficiencies are found, the SPCC Plan shall be revised and amended.

4.1.4 Disposal of Recovered Materials

FAU will properly dispose of recovered materials generated from the cleanup of any discharge or spill. FAU EH&S will perform a hazardous waste determination on any recovered materials, which may require representative sampling and analysis of the materials. To the extent possible, and where feasible, free product will be recovered for recycling or reclamation. In all cases, recovered materials will be transported and disposed of in compliance with applicable laws and regulations, utilizing properly permitted transporters and disposal facilities.

5 Potential Discharge Volumes and Flow Directions

Based on storage container typical mode of use, storage location, and general area usage at this facility, Table 5-1 describes reasonable failure mode, direction of flow, predicted flow rates, and most likely quantity of oil discharged. Supporting calculations are provided directly below.

The probable flow directions are related to surface topography and the location of structures, parking lots, roadways, landscaping, and other property improvements in the local area of probable failure, and are shown on the facility diagram for this SPCC, located in Appendix H and on the SPCC data sheets for each tank, located in Appendix J.

Note: Per the 2008 SPCC Amendments, the values in the table below are estimates for typical failure mode and most likely quantity discharged. These values are not representative of a catastrophic loss scenario, which can result in gradual to nearly instantaneous discharges up to the entire tank volume.

Table 5-1 Potential Discharge Volumes & Flow Directions

Storage Mode	Typical Failure Mode	Direction of Flow	Predicted Flow Rate	Most Likely Quantity Discharged
Regulated ASTs	Overflow during tank loading	Tank fill point to adjacent ground surface then dependent on topography	55 gpm	<25 gallons*
Non-Regulated ASTs	Overflow during tank loading	Tank fill point to adjacent ground surface then dependent on topography	55 gpm	<25 gallons*
Gas Tanks	Overflow during tank loading	Onto adjacent, impermeable ground surface then dependent on topography	55 gpm	<25 gallons*
Waste Oil Tanks	Overflow when manually adding	Onto adjacent, impermeable	<1 gpm	< 1 gallon, incidental spill

	to tank	ground surface then dependent on topography		
Elevators	Leak	Into elevator closet	<1 gpm	0 gallons (contained in building)

*AST Overflow Quantity:

Assume a PTO-driven pump with a 50-80 gpm nominal and 120 gpm maximum flow rate. In likely scenario, discharge occurs while driver is pumping at approximately 55 gpm and tank maximum fill point has been exceeded. Spill bucket is attached to tank and has 3.5 gallons capacity prior to overflow. Assume spill proceeds unhindered for thirty seconds until noticed and stopped.

$V_{Overflow}$ = 55 gpm * 0.5 min – 3.5 gallons = 24.0 gallons

6 Containment and Diversionary Structures

Florida Atlantic University makes every effort to prevent the discharge of oil to the environment. Discharge prevention measures include, but are not limited to, the following:

1. Use of secondary containment and drainage control;
2. Monitoring of fuel transfers;
3. Inspection and maintenance of tanks;
4. Proper storage of oil-containing containers;
5. Training of appropriate personnel.

6.1 Aboveground Storage Tanks

With the exception of the AST located at HB33 (Small Boat Marina), all above ground petroleum oil storage tanks at HBOI have double-walled secondary containment systems.

The tank at HB33 is a single-walled tank in a walled-off containment area that is equipped with a containment drain. This containment area is kept clean and dry at all times. In the event of significant precipitation, water in the HB33 containment is examined for the presence of a visible sheen and is only released if found to be clean. Should a sheen be observed in the containment area, the water would be pumped into drums for proper disposal as a hazardous waste, and the tank and all associated piping would be examined for signs of leaks. Any problems found would be corrected immediately, and any necessary reports to the Florida DEP would be filed using the appropriate forms contained in Appendix I.

HBOI's regulated above ground storage tanks are all equipped with leak detection systems that include electronic interstitial monitoring, sight gages and/or manual drain valves. Most of the University's aboveground storage tanks are used for generator systems and are of the "belly tank" configuration below the generator, with no external fuel piping.

6.2 Underground Storage Tanks

All of HBOI's underground tanks are used for LPG storage and, as such, do not fall under the auspices of the SPCC regulations, as stated in Section 2.4 of this SPCC.

6.3 Transformers

All of the transformers at HBOI are of the dry type, containing no oil. This SPCC is not applicable to these dry transformers, as stated in Section 2.4 of this SPCC.

6.4 Elevators

All hydraulic elevators at the University are located indoors; as such, any releases of hydraulic fluid attributed to a leak or cylinder blowout would be contained in the elevator's secured vault area. These areas have concrete walls and concrete floors and are large enough to contain any release inside the building.

6.5 Other Equipment

Day tanks, hydraulic systems, switch gears, and other oil-containing equipment and machinery are all contained within building structures that serve as secondary containment. These systems contain small amounts of petroleum products and do not fall under the auspices of this SPCC; however, the same precautions and preventative measures that are observed for larger equipment are also observed for these systems.

7 Practicability of Secondary Containment

Florida Atlantic University uses double-walled, above ground storage tank systems for secondary containment for all tanks, with the exception of the single-walled AST located at HB33, which is located in a walled, external, secondary containment. Spill equipment is readily available for response to any oil releases, and is the University's preferred method to prevent discharged oil from reaching navigable waters.

This overall approach is practicable, effective, and has been successfully utilized at other major universities throughout the country.

8 Inspections, Tests and Records

8.1 Regulated Storage Tanks

In the State of Florida, aboveground petroleum oil storage tanks with a capacity greater than 550 gallons and underground petroleum oil storage tanks with a capacity greater than 110 gallons are required to maintain records of the performance of monthly release detection on file for two years. Release detection is accomplished by a combination of audible and visual alarms and visual inspection of tank systems. FAU maintains these records for three years to comply with the requirements of §112.7(e).

8.2 Non-Regulated Storage Tanks

FAU has a number of smaller petroleum oil storage tanks, which are not regulated by the State of Florida. These tanks are typically associated with emergency generator systems. These tanks are inspected on an annual basis, or whenever material repairs are made. FAU maintains these records for three years to comply with the requirements of §112.7(e).

8.3 Other Oil-Containing Tanks, Equipment, and Machinery

FAU also has a number of day tanks, hydraulic systems, switch gears, etc. Many of these have oil capacities of less than 55 gallons or are considered oil-filled electrical, operating, or manufacturing equipment. The SPCC regulations do not apply to containers with a capacity of less than 55 gallons (§112.1(d)(5)), and oil-filled electrical, operating, or manufacturing equipment are not considered bulk storage containers (§112.2).

Loss of oil from these systems results in equipment failures that are immediately detectable and would not result in a discharge from the facility. FAU inspects such equipment as specified by manufacturers; however, records are not retained unless required.

9 Personnel Training and Discharge Prevention Procedures

9.1 Personnel Training

Oil handling personnel at FAU are provided training, which, at a minimum, includes the following topics:

- The operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols;
- Applicable pollution control laws, rules, and regulations;
- General facility operations;
- The contents of this SPCC Plan.

9.2 Discharge Prevention Briefings

Discharge prevention briefings will be scheduled and conducted for oil-handling personnel at least once a year. These briefings will highlight and describe any known discharges (as described in § 112.1(b)) or failures, malfunctioning components, and any recently developed precautionary measures.

Discharge prevention briefings may be conducted at the same time as personnel training to provide pertinent information about lessons learned. A copy of training and meeting records is provided in Appendix M.

9.3 General Discharge Prevention Procedures

FAU will take the following measures to reduce the likelihood of a discharge of oil to the environment:

- Require fueling operations to be continuously attended during transfers.
- Inspect all regulated aboveground storage tanks monthly using the checklists included in Appendix L.
- Inspect all above ground piping and valves when aboveground storage tanks are inspected.
- Promptly correct any oil leaks from tanks, piping, valves, etc.
- Promptly remove and properly dispose of any materials contaminated as a result of leaks or spills.
- Locate all future oil storage tanks and 55-gallon drums away from drains, waterways, and flood prone areas.
- Provide all oil storage containers with secondary containment.
- Maintain fully-stocked spill kits at the hazardous waste facility for immediate campus deployment in the event of a spill.
- Post instructions and phone numbers regarding the reporting of a spill to the National Response Center and the State Watch Office in the offices of Environmental Health & Safety.

9.4 Truck Loading and Offloading Operations

Throughout the year, FAU receives tanker trucks and other supply vehicles for various operations that include the following:

- Refilling the gasoline AST located behind the Campus Operations Building;
- Removing used oil from the AST in the Campus Operations maintenance area;
- Removing waste grease from the waste food oil tanks located at the Center Market Place and Breezeway Food Courts;
- Refilling the hydraulic fluid and motor oil storage tanks in the Campus Operations maintenance area;
- Refueling all of the ASTs that supply the University's emergency generators.

All suppliers must meet the minimum requirements and regulations for tank truck loading/unloading established by the U.S. Department of Transportation.

All truck offloading operations are to be observed by FAU personnel, without exception.

9.4.1 Preparation for Offloading

FAU personnel have several duties that must be carried out prior to the offloading of petroleum or food oil containing product into storage tanks from tankers or other delivery vehicles. These include the following:

1. Ensure driver is parked on a level surface. If the parking surface has an incline, wheel chocks must be used for the duration of the offloading operation.
2. Ensure that drivers set parking brakes.
3. Verify tanker contents to ensure the correct product will be placed in the receiving storage tank.
4. Observe the hookup of hoses and confirm adequate spill response materials are available.
5. Verify the storage tank product level and free capacity prior to offloading.
6. If the receiving tank is equipped with a secondary containment drain valve or plug, make certain it is closed.
7. When offloading gasoline, ensure that a proper vehicle ground connection is made first before any other connection is made, and then connect the vapor recovery line to the storage tank.

9.4.2 Precautions While Offloading

Once offloading has begun, FAU personnel should monitor the liquid level in the tank to ensure an overflow does not occur. Also, make certain the driver stays within the line of sight of the offloading operation so a quick response can be initiated, which may include shutting off the pump, should any problems arise. Make certain, when offloading gasoline, that the tanker remains grounded at all times – the grounding line should not be removed until the very end of the offloading operation.

9.4.3 Precautions Prior to Departure

Once offloading has been completed, the total volume of product transferred to the storage tank should be confirmed. The area around the tank should be briefly surveyed to ensure there has been no overflow or leaks during the offloading process. An FAU employee must be present to observe the disconnecting of all hoses and fittings.

The driver must provide a means for collecting product lost in the disconnecting process. A bucket may be provided by FAU for this purpose if the driver does not have one available. In the case of a gasoline transfer, only after the transfer hose has been disconnected from the storage tank and the area has been properly surveyed for releases shall the vapor recovery hose and grounding line be disconnected (in that order, as appropriate, depending on the product offloaded).

Once the offloading process has been completed and the tanker has been completely disconnected from the storage tank, FAU personnel should do one final inspection to ensure the tank is secure and leak free and that the supply vehicle is not leaking.

9.4.4 Truck Loading and Offloading Emergencies

Truck valve(s) should be used to shut off product in the event of a release, regardless of the cause. Under no circumstances should the driver attempt to start and/or move the vehicle in an emergency situation without clearance from FAU EH&S personnel.

In the event of an uncontrolled release, all efforts should be made to minimize and contain the release. Offloading should be shut down immediately and the discharge response procedures described in Section 4 of this SPCC shall be implemented.

In the event of a catastrophic release from a tanker failure during oil transfer, trained facility personnel would implement necessary first response control measures, including deployment of booms, pigs, socks, sand bags, and any other appropriate, available materials to divert and contain the spill, until an emergency response contractor with large-scale recovery capabilities arrives.

9.5 Secondary Containment for Vehicles

Loading and offloading activities performed at the University include the offloading of gasoline fuel, hydraulic fluid, and motor oil from tanker trucks with their own pumping systems, fueling of university vehicles at the fueling station, and the removal of waste oil. Secondary containment is not provided these operations; however, spill response materials are maintained nearby in Building HB16 in sufficient quantities to contain a release, should one occur.

10 Security

The HBOI campus is closed to the general public. All vehicles entering the portion of the campus that lies east of Old Dixie Highway must check in at the guard gate prior to entry.

Essential personnel including, but not necessarily limited to, police officers and utilities personnel are on duty 24 hours per day, every day. The University Police Department provides constant patrol of the campus and helps ensure oil storage areas remain secure.

10.1 Storage Tank Access

Major petroleum oil storage tanks are located within locked enclosures. Vehicle refueling is only done by fleet maintenance personnel or University police officers. Starter controls for fuel pump dispensers remain locked at all other times. Access to these storage tanks is limited to authorized personnel.

10.2 Elevators and Transformers Access

Elevator closets and transformers are always kept locked to prevent access by unauthorized personnel. The Utilities Department has access to all elevator closets in the event of a hydraulic fluid release or other emergency situation.

10.3 Flow Valve Access

There are no flow valves on oil containers or tanks that would allow direct outward flow of tank contents, causing a release to the environment.

10.4 Starter Control Access

Starter controls on the gasoline ASTs are accessible only to authorized personnel and shall be manually operated by FAU personnel.

10.5 Campus Lighting

FAU facility lighting is adequate to assist in the discovery of discharges occurring during hours of darkness by operating/non-operating personnel as well as the prevention of discharges occurring

through acts of vandalism. The areas of the campus where storage tanks are located are lit during the evening, including all equipment areas.

11 Facility Drainage

11.1 Diked Storage Areas

Per the requirements of §112.8(b), (1) HBOI must restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system, and (2) use valves of manual, open-and-closed design, for the drainage of diked areas.

The single-walled tank containment, located at the Small Boat Marina (HB33), is the only storage area that falls under the requirements of this subsection of the SPCC regulations. As stated in Section 2.4 of this SPCC, the containment for this tank is equipped with a gate valve that is kept closed at all times when not in use. The valve is manually opened only when the containment must be drained following a rain event. Prior to draining the containment, a visual inspection of the contained water is made to ensure there is no oil sheen on the water or free product present.

11.2 Undiked Storage Areas

Per the requirements of §112.8(b)(3), facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls, or where tank truck discharges may occur outside the loading area) must be designed to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility.

11.2.1 Undiked Generator Fuel Tanks

Most of the storage tanks in use at HBOI are configured as generator belly tanks, with no exposed external piping. Loading for these tanks takes place in close proximity to the tank and away from storm drains. In the event of a tank overflow during filling, the most likely failure scenario (see Section 5), the flow of product would be limited by the landscaping, curbing, and building features in proximity to the tank and would not reach navigable waters.

11.2.2 Undiked Facilities Building Fuel Storage Tank

The undiked tank located at the Facilities Building (HB27) is used for vehicle refueling. This tank is double-walled and loading occurs only in a designated loading area. This tank has gas and diesel dispensing pumps located adjacent to the tank on the west side. There is no oil-containing piping that runs from the tank to any other location on campus.

A tank truck release could possibly occur during tank filling operations, but, as in the case of the generator tanks, flow would be constrained by the landscaping features and curbing adjacent to the tank. Free product would not reach the storm sewer located in the adjacent parking area, under the most likely failure scenario (see Section 5).

To ensure an overflow during filling would not pose a threat, a simulated spill using a garden hose and water was conducted on the morning of November 8, 2011. The fill pipes for the tank at HB27 have a

small secondary containment (32” x 32” x 7.5” ~ 33.28 gals) that was allowed to overfill with water from the hose. Approximately 55 gallons of water was used to simulate an amount representative of an overfill scenario. The flow pattern from the tank area was then observed. The simulation confirmed that an overfill during tank loading would not readily reach a storm sewer and would be retained in the loading area and landscaped, curbed area nearby. Photos of the simulation are provided below.

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

12 Bulk Storage Containers / Secondary Containment

Containers used for the bulk storage of oil at FAU are constructed of materials that are compatible with the material stored and the conditions of storage such as pressure and temperature. All bulk storage containers are equipped with secondary containment capable of holding 110 percent of the volume of the primary container (i.e. double-walled tanks).

All FAU bulk storage containers are engineered in accordance with good engineering practice to avoid discharges. Larger bulk storage containers are equipped with high level alarms, secondary containment alarms, and overfill protection. In all cases, a person is required to be present when containers are being filled.

13 Inspections

Regulated storage tanks are visually inspected monthly and monitored for leak detection per Florida Administrative Code 62-761. Storage tanks are also inspected any time material repairs are made to the tank. The outside of the tanks are checked for signs of deterioration, discharges, or accumulation of oil on the tank or adjacent generator casing (as appropriate) as a part of the monthly inspection. Any necessary corrections based on the findings of the inspection are completed in a prompt manner.

A copy of the form used to complete storage tank inspection is included in Appendix L of this SPCC. These records are kept for three years.

14 Leakage Control

Per the requirements of §112.8 (c)(7), the facility must control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

FAU does not have heating coils that discharge into an open watercourse, so this requirement is not applicable for this SPCC Plan.

15 Overfill Prevention Systems

All tanks and bulk container installations have been made in accordance with good engineering practice to avoid discharges. All regulated oil storage tanks are equipped with a fast response system for determining the liquid level of each bulk storage container. Direct vision gauges are monitored during the filling of bulk storage containers. Liquid level sensing devices are inspected as part of the University's ongoing, monthly tank inspection program.

16 Effluent Treatment Facilities

Per the requirements of §112.8 (c)(9), effluent treatment facilities must be observed frequently enough to detect possible system upsets that could cause a discharge.

HBOI no longer has an effluent treatment facility. The retention area adjacent to the former facility has also been backfilled and leveled. This requirement is no longer applicable.

17 Visible Discharges

FAU will promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. The university will also make every effort to keep areas around oil storage containers clean and accessible at all times.

If oil is discovered in secondary containment, an investigation will be conducted to determine whether the situation is the result of a leak or if it can be explained otherwise. The oil will be removed and

properly disposed. The cause of the discharge into secondary containment will be promptly corrected, and any necessary tank system repairs will be made. An Incident Notification Form or Discharge Report Form will be filed with the Department of Environmental Protection, using the form(s) provided in Appendix I, if necessary.

18 Mobile and Portable Containers

Mobile and portable containers will be kept indoors in areas away from floor drains. In the event these types of containers are used outside, they will be placed on spill containment pads and any precipitation will be promptly removed.

All spill containment pads will be of sufficient capacity to hold the full volume of the largest container in use with ample freeboard in the event of precipitation while the containment pad is holding product, generally this will be accomplished by using spill containment pads that have at a minimum 10% excess capacity.

19 Transfer Operations, Pumping, and In-Plant Processes

Aboveground piping systems are integral to emergency generators (i.e. generator directly above fuel tank). The HBOI campus has no underground, oil-containing storage tanks. Due to the limited and protected nature of piping systems at FAU, vehicles will not endanger aboveground piping or other oil transfer operations.

Appendix A – Professional Engineer Certification

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Florida Atlantic University's Spill Containment, Control, and Countermeasure (SPCC) Plan has been reviewed and certified by a registered professional engineer per the requirements of §112.3(d).

I herby attest that:

- I am familiar with the requirements of 40 CFR 112;
- I or my agent has visited and examined:

  Florida Atlantic University
  777 Glades Road
  Boca Raton, Florida 33431;

- The SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR 112;
- Procedures for required inspections and testing have been established; and
- The SPCC Plan is adequate for the facility.

Professional Engineer (PE): _____ (Print or type name.)

Signature: _____ Date: _____

PE registration number: _____ State(s): _____

Appendix B – Record of Review and Amendment & Log Sheet

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

I have completed a review and evaluation of the SPCC Plan for Florida Atlantic University on _____, and ☐ will ☐ will not amend the Plan as a result.
(*Date*) (*Check one*)

Complete this section only if an amendment is required.

Description of Amendment:

The amendment ☐ is ☐ is not a technical amendment to the Plan.
(*Check one*)

If the amendment is a technical amendment to the Plan, a registered Professional Engineer must complete the Professional Engineer's Certification below.

_____ _____
Printed Name & Title Signature

****

SPCC Plan Amendment Review and Certification by Professional Engineer
(To be completed only if a technical amendment to the Plan is required.)

By means of this certification, I attest that:

- I am familiar with the requirements of 40 CFR 112;
- I or my agent has visited and examined:

  Florida Atlantic University, Harbor Branch
  5600 US 1 North
  Fort Pierce, FL 34946;

- The SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR 112;
- Procedures for required inspections and testing have been established; and
- The SPCC Plan is adequate for the facility.

Professional Engineer (PE): _____ (Print or type name.)

Signature: _____ Date: _____

PE registration number: _____ State(s): _____

Table 19-1 Amendment Log Sheet

Entry #	Review or Amendment Description	Amendment Date	Page #

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Appendix C – Confirmation of Management Approval

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Florida Atlantic University is committed to the prevention of discharges of oil to navigable waters and the environment.

This Plan has the full approval of management at a level of authority required to commit the necessary resources to fully implement it.

Responsible Officer: _____ (Print or type name.)

Title: _____

Signature: _____ Date: _____

Appendix D – Facilities, Procedures, Methods or Equipment Not Yet Operational

At the time of execution of this SPCC, all facilities, procedures, methods, and equipment described herein were fully operational. In the event this should change in the future, this Appendix will be amended accordingly.

Appendix E – Certification of Applicability of the Substantial Harm Criteria

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Facility Name: Florida Atlantic University Facility Address: 5600 US 1 North Fort Pierce, FL 34946

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes ___ No _X_

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes ___ No _X_

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C–III to this appendix or a comparable formula 1) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see 40 CFR 112, Appendix E, section 13, for availability) and the applicable Area Contingency Plan.

Yes ___ No _X_

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of 40 CFR 112, Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

Yes ___ No _X_

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes ___ No _X_

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____ _____

Name (please type or print) Signature

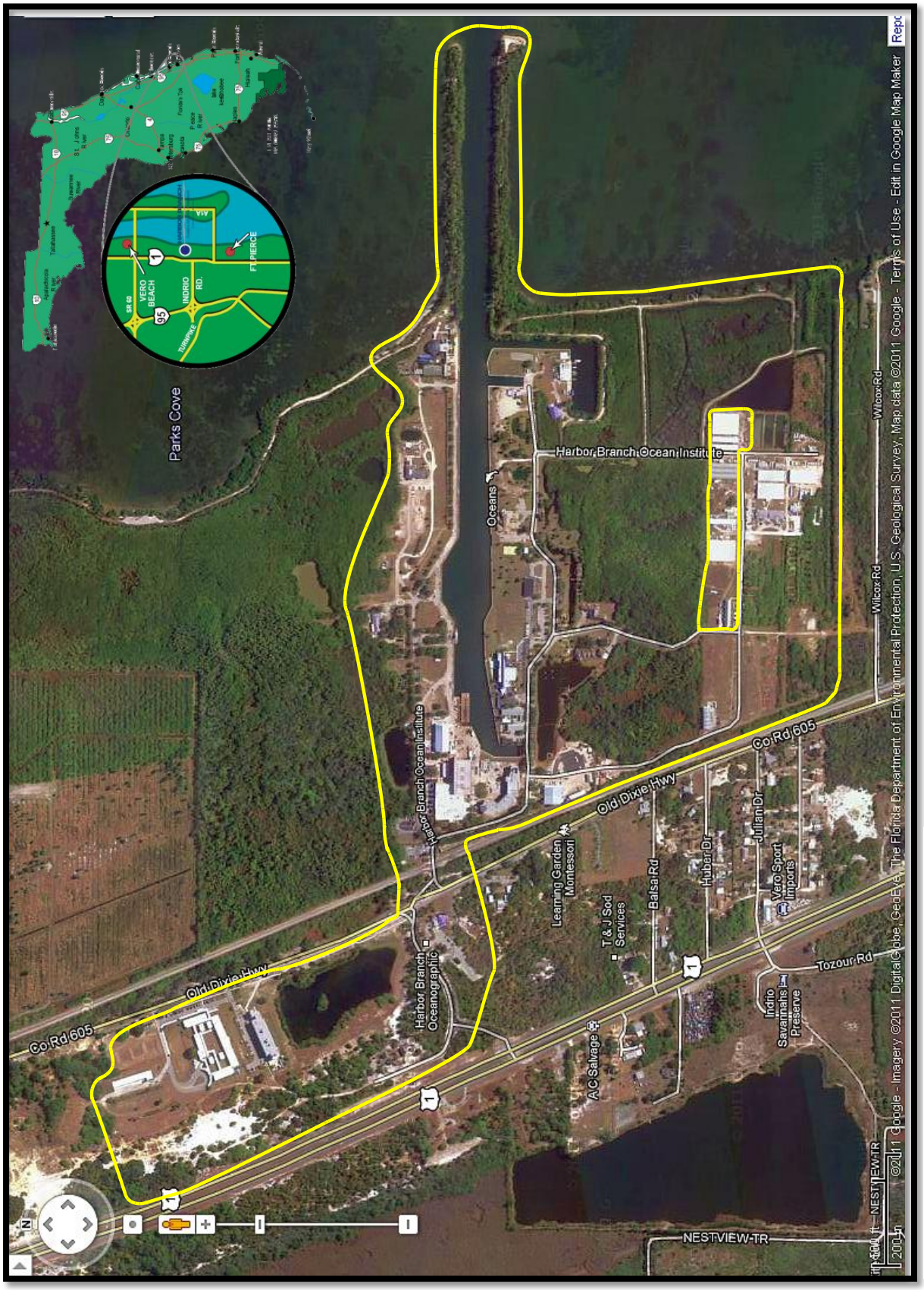
_____ _____

Title Date

Appendix F – Summary of Oil Storage Locations

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Appendix G – Site Plan



FAU Harbor Branch Campus

Appendix H – Facility Diagram

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

Discharge Reporting Form

PLEASE PRINT OR TYPE

DEP Form # 62-761.900(1)
Form Title Discharge Reporting Form
Effective Date _____

Instructions are on the reverse side. Please complete all applicable blanks

1. Facility ID Number (if registered):_____ **2. Date of form completion**:_____

3. General information
Facility name:_____
Facility Owner or Operator: _____
Facility Contact Person_____Telephone number: ( )_____County: _____
Faciility Mailing address: _____
Location of discharge (facility street address):_____
Latitude and Longitude of discharge (If known.)_____

4. Date of receipt of test results or discovery of confirmed discharge: _____month/day/year

5. Estimated number of gallons discharged:_____

6. Discharge affected: [ ] Air [ ] Soil [ ] Ground water [ ] Drinking water well(s) [ ] Shoreline [ ] Surface water (water body name) _____

7. Method of discovery (check all that apply)

[ ] Liquid detector (automatic or manual)	[ ] Internal inspection	[ ] Closure/Closure Assessment
[ ] Vapor detector (automatic or manual)	[ ] Inventory control	[ ] Groundwater analytical samples
[ ] Tightness test	[ ] Monitoring wells	[ ] Soil analytical tests or samples
[ ] Pressure test	[ ] Automatic tank gauging	[ ] Visual observation
[ ] Statistical Inventory Reconciliation	[ ] Manual tank gauging	[ ] Other _____

8. Type of regulated substance discharged: (check one)

[ ] Unknown	[ ] Used/waste oil	[ ] Jet fuel	[ ] Heating oil	[ ] New/lube oil
[ ] Gasoline	[ ] Aviation gas	[ ] Diesel	[ ] Kerosine	[ ] Mineral acid

[ ] Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives (write in name or Chemical Abstract Service (CAS) number)_____
[ ] Other_____

9. Discharge originated from a: (check all that apply)

[ ] Dispensing system	[ ] Pipe	[ ] Barge	[ ] Pipeline	[ ] Vehicle
[ ] Tank	[ ] Fitting	[ ] Tanker ship	[ ] Railroad tankcar	[ ] Airplane
[ ] Unknown	[ ] Valve failure	[ ] Other Vessel	[ ] Tank truck	[ ] Drum

[ ] Other_____

10. Cause of the discharge: (check all that apply)

[ ] Loose connection	[ ] Puncture	[ ] Spill	[ ] Collision	[ ] Corrosion
[ ] Fire/explosion	[ ] Overfill	[ ] Human error	[ ] Vehicle Accident	[ ] Installation failure

[ ] Other_____

11. Actions taken in response to the discharge: _____

12. Comments: _____

13. Agencies notified (as applicable):

[ ] State Warning Point	[ ] National Response Center	[ ] Fire Department.	[ ] County Tanks Program	[ ] DEP (district/person)
1-800-320-0519	***1-800-424-8802***	_____	_____	_____

14. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.

_____ _____
Printed Name of Owner, Operator or Authorized Representative Signature of Owner, Operator or Authorized Representative.

Oil spills to navigable waters of the United States and releases of a reportable quantities of CERCLA hazardous substances must be reported immediately to the National Response Center. Reports to the National Response Center of oil spills to navigable waters need not be repeated to any other federal, state, or local agency. Conditions at the site that do not involve spills to navigable waters of the United States, or CERCLA hazardous substances, that pose an immediate threat to human health or the environment must be reported to the State Warning Point or the Local Fire Department. Never-the-less, this form must be submitted for all discharges from facilities with storage tank systems, and sites in accordance with Chapters 62-761 and 770, F.A.C.

State Warning Point	*National Response Center*	*Local Fire Department*
1-800-320-0519	*1-800-424-8802*	*(obtain local number)*

This form must be used to report any confirmed discharge, or of any one of the following, unless the discharge is from a previously-known and reported discharge:

1.. Results of analytical or field tests of surface water, groundwater, or soils indicating the presence of contamination by:
   a. A hazardous substance from a UST;
   b. A regulated substance, other than petroleum products; or
   c. Petroleum products' chemicals of concern specified in Chapter 62-770, F.A.C.;
2. A spill or overfill event of a regulated substance to soil equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in CFR Title 40, Part 302;
3. Free product or sheen of a regulated substance present in surface or groundwater, soils, basements, sewers, and utility lines at the facility or in the surrounding area
4. Soils stained by regulated substances observed during a closure assessment performed in accordance with Rule 62-761.800, F.A.C.

A copy of this form must be delivered or faxed to the County within 24 hours of the discovery of a discharge, or before the close of the next business day. It is recommended that the original copy be sent in the mail. If the discharge occurs at a county-owned facility, a copy of the form must be faxed or delivered to the local DEP District office.

DEP District Office Addresses:

Northwest District
160 Governmental Center, Suite 308
Pensacola, FL 32501-5794
Phone: 850-595-8360
FAX: 850-595-8417

Northeast District
7825 Baymeadows Way, Suite B 200
Jacksonville, FL. 32256-7590
Phone: 904-807-3300
FAX: 904-448-4366

Central District
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Phone: 407-894-7555
FAX: 407-897-6499

Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926
Phone: 813-632-7600
FAX: 813-632-7665

South District
2295 Victoria Ave. Suite 364
Ft. Myers FL 33901-2549
Phone: 239-332-6975
FAX: 239-332-6969

Southeast District
400 N. Congress Ave.
West Palm Beach, FL 33416-5425
Phone: 561-681-6600
FAX: 561-681-6790

Incident Notification Form

DEP Form # 62-761.900(6)
Form Title Incident Notification Form
Effective Date: July 13, 1998

PLEASE PRINT OR TYPE

Instructions are on the reverse side. Please complete all applicable blanks

1. Facility ID Number (if registered):_____ **2. Date of form completion**:_____

3. General information

Facility name:_____
Facility Owner or Operator: _____
Contact Person:_____Telephone number: ( )_____County: _____
Facility mailing address: _____
Location of incident (facility street address):_____
Latitude and Longitude of incident (If known.)_____

4. Date of Discovery of incident:_____month/day/year

5. Monitoring method that indicates a possible release or an incident: (check all that apply)

[ ] Liquid detector (automatic or manual)
[ ] Vapor detector (automatic or manual)
[ ] Tightness test
[ ] Pressure test
[ ] Breach of integrity test
[ ] Visual observation
[ ] Groundwater samples
[ ] Monitoring wells
[ ] Internal inspection
[ ] Odors in the vicinity
[ ] Automatic tank gauging
[ ] Manual tank gauging
[ ] Closure
[ ] Inventory control
[ ] Statistical Inventory Reconciliation
[ ] Groundwater analytical samples
[ ] Soil analytical tests or samples
[ ]Other_____

6. Type of regulated substance stored in the storage system: (check one)

[ ] Diesel
[ ] Gasoline
[ ] Heating oil
[ ] Used\waste oil
[ ] Aviation gas
[ ] Jet fuel
[ ] New/lube oil
[ ] Kerosene
[ ] Other _____
[ ] Hazardous substance - includes CERCLA substances, pesticides, ammonia, chlorine, and their derivatives, and mineral acids.
(write in name or Chemical Abstract Service (CAS) number)_____

7. Incident involves or originated from a: (check all that apply)

[ ] Tank [ ] Unusual operating conditions [ ] Dispensing equipment [ ] Pipe [ ] Overfill protection device
[ ] Piping sump [ ] Release detection equipment [ ] Secondary containment system [ ] Other [ ] Dispenser Liners
[ ] Loss of >100 gallons to an impervious surface other than secondary containment [ ] Loss of >500 gallons within secondary containment

8. Cause of the incident, if known: (check all that apply)

[ ] Overfill (<25 gallons)
[ ] Faulty Probe or sensor
[ ] Spill (<25 gallons)
[ ] Human error
[ ] Theft
[ ] Installation failure
[ ] Corrosion
[ ] Other_____

9. Actions taken in response to the incident: _____
_____
_____
_____

10. Comments: _____
_____
_____
_____

11. Agencies notified (as applicable):

[ ] Fire Department. [ ] Local Program [ ] DEP (district/person)

12. To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

_____ _____
Printed Name of Owner, Operator or Authorized Representative Signature of Owner, Operator or Authorized Representative.

Instructions for completing the Incident Notification Form

This form must be completed to notify the County of all incidents, or of the following suspected releases:

1. A failed or inconclusive tightness, pressure, or breach of integrity test,
2. Internal inspection results, including perforations, corrosion holes, weld failures, or other similar defects that indicate that a release has occurred.
3. Unusual operating conditions such as the erratic behavior of product dispensing equipment, the sudden loss of product from the storage tank system, or any unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking;
4. Odors of a regulated substance in surface or groundwater, soils, basements, sewers and utility lines at the facility or in the surrounding area;
5. The loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces other than secondary containment, driveways, airport runways, or other similar asphalt or concrete surfaces;
6. The loss of a regulated substance exceeding 500 gallons inside a dike field area with secondary containment; and
7. A positive response of release detection devices or methods described in Rule 62-761.610, F.A.C., or approved under Rule 62-761.850, F.A.C. A positive response shall be the indication of a release of regulated substances, an exceedance of the Release Detection Response Level or a breach of integrity of a storage tank system.

If the investigation of an incident indicates that a discharge did not occur (for example, the investigation shows that the situation was the result of a theft or a malfunctioning electronic release detection probe), then a letter of retraction should be sent to the County within fourteen days with documentation that verifies that a discharge did not occur. If within 24 hours of an incident, or before the close of the County's next business day, the investigation of the incident does not confirm that a discharge has occurred, an Incident Report Form need not be submitted.

A copy of this form must be delivered or faxed to the County within 24 hours of the discovery of an incident, or before the close of the next business day. It is recommended that the original copy be sent in the mail. If the incident occurs at a county-owned facility, a copy of the form must be faxed or delivered to the local DEP District office.

DEP District Office Addresses:

Northwest District
160 Governmental Center
Pensacola FL. 32501-5794
Phone: 850-595-8360
FAX: 850-595-8417

Northeast District
7825 Baymeadows Way Suite B 200
Jacksonville FL. 32256-7590
Phone: 904-488-4300
FAX: 904-488-4366

Central District
3319 Maguire Blvd. Suite 232
Orlando, FL. 32803-3767
Phone: 407-894-7555
FAX: 407-897-2966

Southwest District
3804 Coconut Palm Dr.
Tampa FL. 33619-8218
Phone: 813-744-6100
FAX: 813-744-6125

South District
2295 Victoria Ave. Suite 364
Ft. Myers FL. 33901-2549
Phone: 813-332-6975
FAX: 813-332-6969

Southeast District
400 N. Congress Ave.
West Palm Beach, FL. 33416-5425
Phone: 561-681-6600
FAX: 561-681-6790

(02/01/98)

Appendix J – SPCC Data Sheets for Aboveground Storage Tanks

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.

FLORIDA ATLANTIC UNIVERSITY

Above Ground Storage Tank
Monthly Visual Inspection Checklist*

Facility ID# 9808705 Tank #_____ Tank Location Bldg.#_____

Checklist Items	Yes/No	Comments
Tank Condition		
Is the tank corroded, cracked, or structurally damaged?		
Are there any signs of petroleum product (stains, free product) on or around the tank?		
Do hoses or dispensers show any evidence of damage or excessive wear?		
Is the tank gauge damaged or malfunctioning?		
Is the "Release Detection Response Level Description" document missing or illegible?		
Secondary Containment Systems		
If the tank is equipped with a release detection alarm, is it sounding or indicated?		
If the tank is equipped with a release detection alarm, does the test light and/or horn fail to work?		
If the tank is equipped with a valve on the drain port, does anything come out when the valve is opened?		
If the tank is equipped with a leak detection sight tube or inspection port, is petroleum product visible?		
Is petroleum product or water present in the overfill protection chamber (spill bucket)?		
If the tank is not equipped with a valve for inspection purposes, is the tank drain plug missing or loose?		
Is the "diesel" label on the overfill protection chamber (spill bucket) missing or faded?		
Additional Comments		

INSTRUCTIONS

Complete this checklist on the 15th of each month and send the completed form to EH&S, CO69, Room 112; fax it to 7-2210; or email it to ehs@fau.edu. If the 15th falls on a weekend, complete the form the preceding Friday.

All answers should be "No" or "N/A". Explain any "Yes" answers in the "Comments" section, and notify EH&S immediately at 7-3129. Any "Yes" answer requires corrective action.

If there is a visible leak of diesel fuel, immediately notify EH&S at 7-3129 and begin investigating where the leak originated (i.e. filling operations, tank leakage, etc.). An incident or discharge report form may have to be completed by EH&S.

Inspection Completed by: _____ _____
(Printed Name) (Signature)

Date Completed: _____

**Keep this completed form on file for at least 3 years.*

Attachment "A"

Appendix M – Training Records

Please refer to the hardcopy of this SPCC Plan, kept in the Environmental Health & Safety Department.