SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Prepared for:
UNIVERSITY OF HOUSTON – CLEAR LAKE
2700 BAY AREA BLVD
HOUSTON, TEXAS 77058

Prepared By:

Zephyr Environmental Corporation
TEXAS ENGINEERING FIRM REGISTRATION # F-102
2600 Via Fortuna, Suite 450
Austin, Texas 78746-6544

April 2014

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SPILL PREVENTION, CONTROL AND COUNTERMEASURES

QUICK REFERENCE GUIDE

CONTINGENCY MEASURES FOR

RELEASE OF OIL

UNIVERSITY OF HOUSTON – CLEAR LAKE

2700 BAY AREA BLVD

HOUSTON, TEXAS 77058

April 2014

40 CFR 112.7(a)(3)(iv) - Address Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

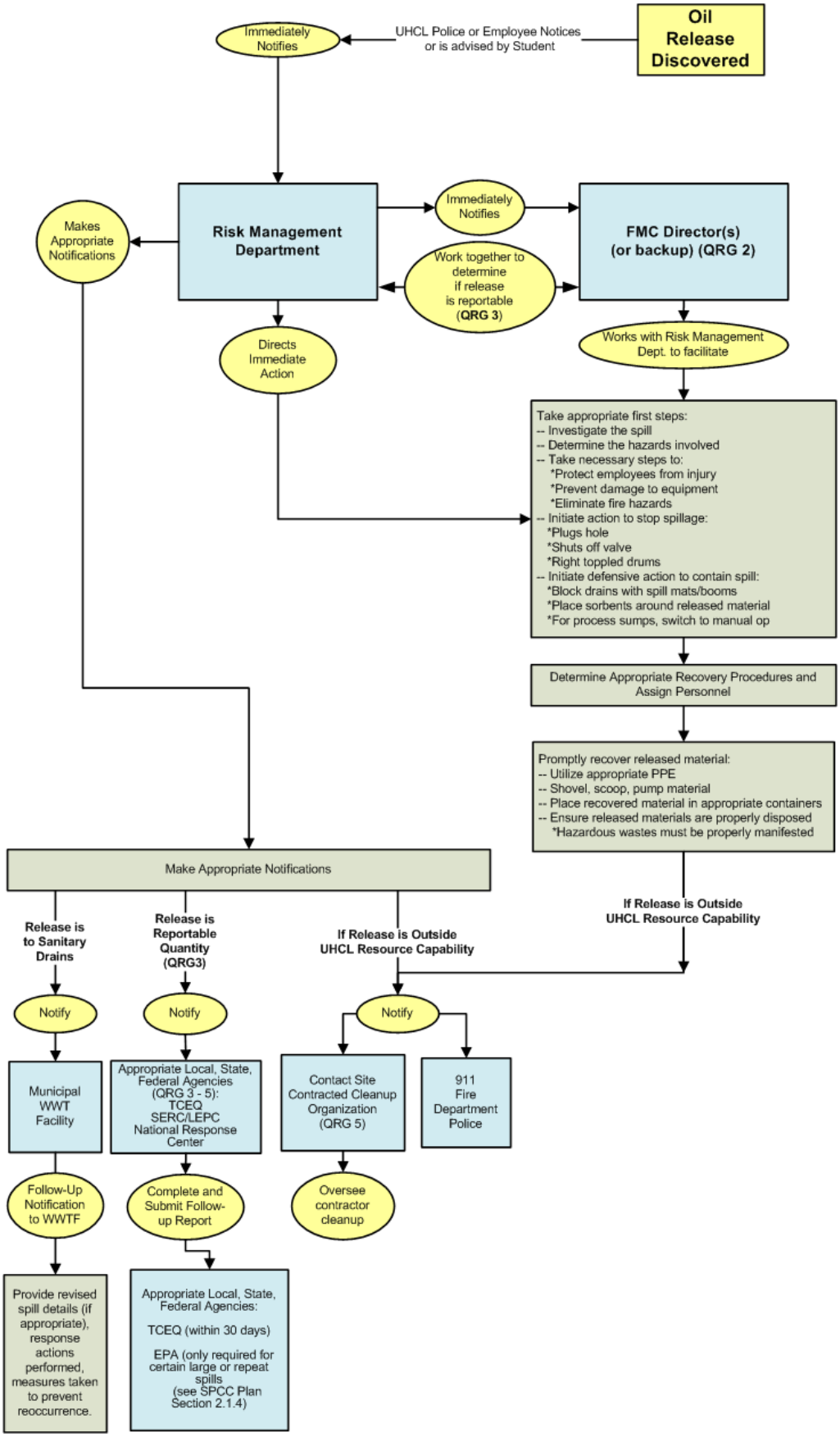
40 CFR 112.7(a)(3)(v) - Address methods of disposal of recovered materials in accordance with applicable legal requirements;

40 CFR 112.7(a)(3)(vi) – Provide contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in 40 CFR 112.1(b).

40 CFR 112.7(a)(5) – Organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material.

This Quick Reference Guide (QRG) provides the steps the University of Houston - Clear Lake (UHCL) personnel take in the event of a release of oil at the UHCL campus. Persons should refer to the campus Spill Prevention Control and Countermeasures Plan for specific information regarding oils stored, oil volumes, and spill prevention measures.

QRG 1
EMERGENCY PROCEDURES – FLOW DIAGRAM



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CAMPUS CONTACTS

Director of Risk Management Contact

In the event of any release of oil, the person who notices the spill must immediately notifies the Director of Risk Management, the designated person responsible for spill control (or his backup/alternate):

Harry Stenvall, Director of Risk Management (Primary contact)	UHCL phone: 281-283-2110 Cell (24-hr contact):
Niki Pearce, EHS Coordinator (Alternate contact)	UHCL phone: 281-283-2109 Cell (24-hr contact): 713-922-1178
Lisa Coen, EHS Coordinator (Alternate contact)	UHCL phone: 281-283-2107 Cell (24-hr contact): 832-260-6975
Celina Gauthier, EHS Coordinator (Alternate contact)	UHCL phone: 281-283-2104 Cell (24-hr contact): 832-260-6975

The Director of Risk Management along with the Environmental, Health and Safety (EHS) Coordinator act as a technical resource to the Director of Facilities, Maintenance, and Construction (FMC) and FMC personnel during response actions, and are responsible for determining if the UCHL personnel are capable of responding to the release, conducting the actual response, determining if the release requires reporting to any required Federal, State or Local government agency, and making such reports.

Facility, Maintenance, and Construction (FMC) Contacts

FMC is responsible for maintaining all oil storage facilities, generators, elevators, and transformers, or the contracts associated with them. The Associate Vice President (AVP) of FMC will be notified for all releases, along with the FMC personnel responsible for the respective equipment where the release occurred.

Pam Groves, Director of Building Maintenance, Systems Operations (Primary contact)	UHCL phone: 281-283-2250 (business hs) Cell (24-hr contact): 713-858-6252
Ward Martaindale, AVP of FMC (Alternate contact)	UHCL phone: 281-283-2250 Cell (24-hr contact): 713-297-1455

Municipal Wastewater Treatment Contact

In the event of a release of oil to the facility's sanitary drains that discharge to the local publicly owned treatment facilities, the Director of Risk Management will contact the treatment facility.

Clear Lake Water Authority 900 Bay Area Blvd Houston, TX 77058	Phone (24-hr): 281-488-1164 Fax: 281-488-3400

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Risk Management
Regulatory Agency Immediate Notification Requirements
Agency Contacts and Reportable Quantities [40 CFR 112.7(a)(3)]

In the event of a release of a hazardous material, immediate notification to local, state, and federal agencies are required under certain circumstances.

AGENCY	PHONE NUMBER	WHEN
OIL RELEASED ABOVE REPORTABLE QUANTITIES (RQ):		
To satisfy Texas requirements, one of the following:		
TCEQ Spill Reporting (24-Hour) [1]	800-832-8224	Upon the determination that a RQ spill has occurred, notify TCEQ as soon as possible but not later than 24 hours after discovery.
TCEQ Region 12 Office	713-767-3500 (Houston)	
State Emergency Response Center (SERC)	800-832-8224	
To satisfy National/Federal Requirements for RQ release of Oil:		
National Response Center [2]	800-424-8802	Upon the determination that a RQ spill has occurred, notify NRC as soon as possible but not later than 24 hours after discovery.
RELEASES CREATING AN IMMINENT THREAT, FIRE, AND HAZARDOUS MATERIALS:		
Fire Department	911	If the discharge or spill creates an imminent health threat, immediately notify and cooperate with local emergency authorities
Police Department	911	
Southeast Regional LEPC	911 713-475-4996	
OTHER LOCAL REQUIRED RELEASE NOTIFICATION		
Harris County Pollution Control Services, Emergency Response Services Section Harris County Pollution Control Service Department	713-920-2831 (24-hr spill phone) 713-274-6356 (non-emergencies) 713-274-6300 (main) 713-274-6475 (fax)	All oil discharges or spills
City of Houston Water Quality Control – Bureau of Public Health Engineering (BPHE)	713-920-2831 (HCPHES, see above)	All oil discharges or spills to the storm sewer from the **Arbor or Delta Buildings** to storm sewer

(continued on next page)

[1] The 24-hour Spill Reporting line is supported by several Texas agencies and is answered 24 hours a day. It serves as the TCEQ spill reporting line during the day and the State Emergency Response Commission (SERC) line at night.

[2] The NRC is the sole federal point of contact for reporting all spills to water, or releases of hazardous materials exceeding their reportable quantity.

AGENCY	PHONE NUMBER	WHEN
OTHER LOCAL REQUIRED RELEASE NOTIFICATION *(continued)*		
City of Pasadena Office of Emergency Management	911 713-475-7800 (24-hr dispatcher) 713-475-5588 (main)	All oil discharges or spills to the storm sewer from the **Bayou/SSCB/FMC/NOA Buildings**
Clear Lake Water Authority	281-488-1164 (24 –hr)	All oil discharges or spills **to the sanitary sewer** system

Determining Reportable Quantities:
TCEQ and NRC Spill Notification

Oil Spills onto Land:

- 24 gallons or more of used oil or petroleum products[3],
    - 210 gallons or more of crude oil, unused (new) oil, or oil that is not a petroleum product, or
    - The quantity designated as the RQ in 40 CFR 302.4 Table 302.4.

Oil Spills into Waters of the State or Navigable Waters of the U.S.:

- Discharges that cause a sheen or discoloration on the surface of a body of water;
- Discharges that violate applicable water quality standards; and
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

QRG-4 provides a list of the information to report to State and Federal agencies.

[3] Petroleum product – In Texas, a petroleum product is defined as a petroleum substance obtained from distilling and processing crude oil that is liquid at standard conditions of temperature and pressure, and that is capable of being used as a fuel for the propulsion of a motor vehicle or aircraft, including but not necessarily limited to motor gasoline, gasohol, other alcohol blended fuels, aviation gasoline, kerosene, distillate fuel oil, and #1 and #2 diesel. The term does not include naphtha-type jet fuel, kerosene-type jet fuel, or a petroleum product destined for use in chemical manufacturing or feedstock of that manufacturing. 30 TAC 327.2

QRG-4

State and Federal Regulatory Agency Spill Reporting Information Requirements [40 CFR 112.7(a)(4) and 30 TAC 327]

In the event a release is required to be reported, copy this page, and be prepared to provide agency the following information:

1. Address/location of the facility: _____
2. Phone number of the facility: _____
3. Date and time of the discharge: _____
4. Type of material discharged: _____
5. Estimates of the total quantity discharged: _____
6. Estimates of the quantity discharged to navigable waters or adjoining shorelines: _____
7. The source of the discharge: _____
8. Description of all affected media: _____
9. Cause of the discharge: _____
10. Any damages or injuries caused by the discharge: _____
11. Actions being used to stop, remove, and mitigate the effects of the discharge: _____

    _____

    _____
12. Whether an evacuation is needed: _____
13. Names of individuals and/or organizations who have also been contacted: _____

    _____

    _____
14. A description of the extent of actual or potential water pollution or harmful impacts to the environment and an identification of any environmentally sensitive areas or natural resources at risk: _____

    _____

    _____
15. Any known or anticipated health risks: _____

IMPORTANT:

Record the information you provided to the agency in the blanks, above. Use more pages if necessary.
Also record the following:

Agency Contacted: _____ Case No: _____

Any additional information: _____

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CAMPUS CLEANUP CONTRACTORS [40 CFR 112.7(a)(3)]

In the event UHCL determines that an oil release exceeds UHCL's resources for cleanup, the following cleanup organizations will be contacted as appropriate:

Contractor Name:	**Clean Harbors Environmental Services Inc.**
Phone Number:	800-645-8265 (24-hr) 291-910-7684 (non-emergency)
Addresses:	P.O. Box 859048 Braintree, MA 02185-9046
Contractor Resources:	Trained response personnel Containment materials Absorbent materials Drums/Totes/rolloff and vacuum boxes, vacuum trucks Vehicles for hauling contaminated material
Contractor Name:	**Garner Environmental Services**
Phone Number:	800-424-1716
Addresses:	1717 W. 13th Street Deer Park, TX, 77536
Contractor Resources:	Trained response personnel Containment materials Absorbent materials Drums/Totes Vehicles for hauling contaminated material A full listing of Garner resources is available on their website: http://garner-es.com/
Contractor Name:	**Allied International Emergency, LLC**
Phone Number:	817-595-0100 (24-hr) or 800-980-7911 (24-hr)) 817-595-0125 (fax)
Addresses:	2416 Gravel Drive Fort Worth, TX 76118
Contractor Resources:	Trained response personnel Containment materials Absorbent materials Drums/Totes Vehicles for hauling contaminated material

Contractor Name:	**Clean Harbors Environmental Services Inc.**
Contractor Name:	**Eagle Construction & Environmental Services, LP**
Phone Number:	800-336-0909 (24-hr) 281-867-9131 (non-emergency)
Addresses:	1700 North E Street La Porte, TX 77571
Contractor Resources:	Trained response personnel Containment materials Absorbent materials Drums/Totes Vehicles for hauling contaminated material

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CONTINGENCY MEASURES - QUICK REFERENCE GUIDE (QRG)

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PROFESSIONAL ENGINEER CERTIFICATION

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
UNIVERSITY OF HOUSTON - CLEAR LAKE
HOUSTON, TEXAS

I hereby attest that the following is true and correct:

(1) That I am familiar with the requirements of 40 CFR Part 112;

(2) That I or my agent have visited and examined the facility;

(3) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;

(4) That procedures for required inspections and testing have been established; and

(5) That the Plan is adequate for the facility.

Robin D. Cosgrove
Printed Name of Licensed Professional Engineer

Robin D. Cosgrove
Signature of Licensed Professional Engineer

Date April 8, 2014

License No. 65046 State Texas

REVIEW AND EVALUATION RECORD

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
UNIVERSITY OF HOUSTON - CLEAR LAKE
HOUSTON, TEXAS

University of Houston - Clear Lake will review and evaluate this SPCC Plan at least once every five years in accordance with 40 CFR §112.5(b). As a result of this review and evaluation, the University of Houston - Clear Lake will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any substantive technical amendment to the SPCC Plan, i.e. when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in 40 CFR §112.1(d), will be certified by a Professional Engineer in accordance with 40 CFR §112.5(e). Implementation of any amendment must be as soon as possible, but no later than six months following completion of the amended Plan.

The owner or operator of the facility, or a person at a management level with sufficient authority to commit the necessary resources, must document completion of review. Copies of the review and evaluation record will be maintained with the SPCC Plan.

"I have completed review and evaluation of the SPCC Plan for the University of Houston - Clear Lake

on _____
(date of review)

and _____ amend the Plan as a result."
(will [1] or will not)

Reviewed by: _____
(owner / operator / management)

Note
(1) If amendments are required for the SPCC Plan, complete the SPCC Review and Amendment Log located on the following page.

SPCC PLAN REVIEW AND AMENDMENT LOG

A summary of scheduled five-year reviews and Plan amendments are recorded on the table provided below. This log must be completed even if no amendment is made to the Plan. Unless a technical or administrative change prompts an earlier review, the next scheduled review of this Plan must occur within five years of the initial or previous Plan certification date.

Revision Made	Page/Section Number	Date	Authorized Individual	P.E. Certification Necessary?
Original Plan Preparation	all	April 2014	Robin Cosgrove PE, Zephyr Environmental Corp.	Yes ☒ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐
				Yes ☐ / No ☐

Note: If technical amendments are required for the SPCC Plan, attach Professional Engineer Certification to this document.

MANAGEMENT APPROVAL

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
UNIVERSITY OF HOUSTON - CLEAR LAKE
HOUSTON, TEXAS

University of Houston - Clear Lake (UHCL) is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention, Control, and Countermeasure Plan for the University of Houston - Clear Lake.

Authorized Facility Representative: Ward Martaindale

Signature: Ward Martaindale

Title: VP Facilities Maintenance and Construction

Date: 4/25/2014

Designated Person Accountable for SPCC Plan: Harry Stenvall

Signature: Harry Stenvall

Title: Director of Risk Management

Date: 04/24/2014

1.0 INTRODUCTION

1.1 GENERAL APPLICABILITY

§112.1(b) – Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a non-transportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States belonging to, appertaining to, or under the exclusive management authority of the United States 9 Magnuson Fishery Conservation and Management Act) that has oil in:

(1) Any aboveground container;

(2) Any completely buried tank as defined in §112.2;

(3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in §112.2;

(4) Any "bunkered tank" or "partially buried tank" as defined in §112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

University of Houston - Clear Lake (hereafter referred to as UHCL) is the owner of a non-transportation related onshore facility engaged in storing, transferring, distributing, using, and consuming oil products which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful as described in 40 CFR Part 110, into or upon the navigable waters of the United States or adjoining shorelines.

§112.1(d) *- Except as provided in paragraph (f) of this section, this part does not apply to:*

§112.1(d)(1) - The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:(i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.

§112.1(d)(2) - Any facility which, although otherwise subject to the jurisdiction of EPA, meets both of the following requirements:

(i) The completely buried storage capacity of the facility is 42,000 U.S. gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in §112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter, or the capacity of any underground oil storage tanks deferred under 40 CFR part 280 that supply emergency diesel generators at a nuclear power generation facility licensed by the Nuclear Regulatory Commission and subject to any

Nuclear Regulatory Commission provision regarding design and quality criteria, including, but not limited to, 10 CFR part 50. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in §112.2 and the capacity of intra-facility gathering lines subject to the regulatory requirements of 49 CFR part 192 or 195.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 U.S. gallons or less of oil. For the purposes of this exemption, only containers with a capacity of 55 U.S. gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes:

(A) The capacity of a container that is "permanently closed" as defined in §112.2;

(B) The capacity of a "motive power container" as defined in §112.2;

(C) The capacity of hot-mix asphalt or any hot-mix asphalt container;

(D) The capacity of a container for heating oil used solely at a single-family residence;

(E) The capacity of pesticide application equipment and related mix containers.

§112.1(d)(4) Any completely buried storage tank, as defined in Sec. 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, or any underground oil storage tanks including below-grade vaulted tanks, deferred under 40 CFR part 280, as originally promulgated, that supply emergency diesel generators at a nuclear power generation facility licensed by the Nuclear Regulatory Commission, provided that such a tank is subject to any Nuclear Regulatory Commission provision regarding design and quality criteria, including, but not limited to, 10 CFR part 50. Such emergency generator tanks must be marked on the facility diagram as provided in Sec. 112.7(a)(3), if the facility is otherwise subject to this part.

§112.1(d)(5) Any container with a storage capacity of less than 55 gallons of oil.

§112.1(d)(6) Any facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this paragraph.

§112.1(d)(7) Any "motive power container," as defined in §112.2. The transfer of fuel or other oil into a motive power container at an otherwise regulated facility is not eligible for this exemption.

§112.1(d)(8) Any Hot-mix asphalt, or any hot-mix asphalt container.

§112.1(d)(10) Any pesticide application equipment or related mix containers.

UHCL is subject to the SPCC requirements by virtue of having an aggregate oil storage capacity greater than or equal to 1,320 gallons of oil in containers having a capacity of 55 gallons or greater. Only those oil containers which have an oil storage capacity of 55 gallons or more are subject to 40 CFR Part 112 and are included in this Plan.

Due to its location, the facility could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines. This determination is based solely on geographic and location aspects of the facility (proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.), and excludes consideration of man-made features such as catch basins, shutoff valves, equipment, or other structures which serve to prevent an oil discharge from reaching navigable waters of the US or adjoining shorelines.

Consequently, the facility is required to develop, implement, and maintain this SPCC Plan under the applicability requirements of 40 CFR §112.1 (b) and (e).

1.2 PURPOSE AND SCOPE

> ***§112.3*** *- The owner or operator of an onshore or offshore facility subject to 40 CFR 112, must prepare in writing and implement a Spill Prevention Control and Countermeasure Plan (hereafter "SPCC Plan"), in accordance with § 112.7, and any other applicable section of 40 CFR 112.*
>
> ***§112.3(a)(1)*** *Except as otherwise provided in this section, if your facility, or mobile or portable facility, was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, and implement the amended Plan no later than November 10, 2011.*
>
> *If such a facility becomes operational after August 16, 2002, through November 10, 2011, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan on or before November 10, 2011.*
>
> *If such a facility (excluding oil production facilities) becomes operational after November 10, 2011, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan before you begin operations.*
>
> *You are not required to prepare a new Plan each time you move a mobile or portable facility to a new site; the Plan may be general. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. The Plan is applicable only while the mobile or portable facility is in a fixed (non-transportation) operating mode.*

The UHCL campus has containers and equipment having oil storage capacities of 55 gallons and larger which in aggregate have an oil storage capacity which exceeds 1,320 gallons. Pursuant to the provisions of the 2002 final rule[1], and subsequent amendments[2] to Title 40 of the Code of Federal Regulations Part 112 (40 CFR Part 112) this Spill Prevention, Control, and Countermeasures (SPCC) Plan has been prepared for the UHCL facility located in Houston, Texas.

The UHCL campus is an onshore facility that is not an "oil production facility" that maintains an aggregate aboveground oil storage capacity greater than 10,000 gallons[3]. As required by the SPCC regulations, this SPCC Plan has been prepared in accordance with good engineering practices and has been signed and certified by a Professional Engineer (see page iv). The Plan

[1] 67 FR 47042 (July 17, 2002)

[2] 71 FR 77266 (December 26, 2006), 73 FR 29136 (December 5, 2008), 74 FR 58754 (November 13, 2009), and 75 FR 198 (October 14, 2010)

[3] Facilities which maintain an aggregate aboveground storage capacity less than 10,000 gallons may meet the definition of a "Qualified Facility". The SPCC Rules provides that facilities meeting this definition may self-certify their SPCC Plans under specified conditions.

has been approved by management who fully support and commit the necessary resources to fully implement the Plan (see page vii).

The purpose of the SPCC Plan is to establish engineering and management procedures, methods, equipment, and other requirements to prevent release of oils from entering waters of the state (including groundwater). UHCL has anticipated potential situations that could result in the release of oils and developed this Plan to avoid and address these circumstances.

This SPCC Plan, and the implementation thereof, is designed to complement existing laws, regulations, rules, standards, policies and procedures pertaining to safety standards, fire prevention and pollution prevention rules, so as to form a comprehensive balanced federal/state spill prevention program to minimize the potential for oil discharges. The campus will continue to comply with other federal, state or local laws.

> ***§112.3(e)*** *If you are the owner or operator of a facility for which a Plan is required under this section, you must: (1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and (2) Have the Plan available to the Regional Administrator for on-site review during normal working hours.*

UHCL will maintain a copy of the SPCC Plan in the office of the Director of Risk Management. This Plan will be available to the Regional Administrator during normal working hours.

In addition, the QRG will be maintained adjacent to each of the oil storage locations.

1.3 PLAN AMENDMENT BY REGIONAL ADMINISTRATOR

> ***§112.4****- If you are the owner or operator of a facility subject to this part, you must: (a)Notwithstanding compliances with §112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b, or discharged more than 42 U.S. gallons of oil in each of two discharges as described in §112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:*
>
> *(1) Name of your facility;*
> *(2) Your name;*
> *(3) Location of the facility;*
> *(4) Maximum storage or handling capacity of the facility and normal daily throughput;*
> *(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;*
> *(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;*
> *(7) The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;*

(8) Additional preventative measures you have taken or contemplated to minimize the possibility of recurrence; and
(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

UHCL has never discharged more than 1,000 gallons of oil in a single discharge as described in §112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in §112.1(b), occurring in any twelve month period.

If UHCL discharges to navigable waters or adjoining shorelines more than 1,000 U.S. gallons of oil in a single discharge, or more than 42 U.S. gallons of oil in each of two discharges occurring within any twelve month period, they will submit the information required by this section to the EPA Region 6 Regional Administrator (RA) within 60 days from the time of the spill.

This information will be sent to the following address:
USEPA – Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202
Phone: (214) 665-6489

Upon receipt of UHCL's information, the EPA may conduct a review and make recommendations as to further procedures, methods, equipment, and other requirements necessary to prevent and to contain discharges from the campus. The EPA may require a Plan amendment if found that UHCL's SPCC Plan does not meet the requirements of 40 CFR Part 112, and determines that amendment is necessary to prevent and contain discharges from the campus.

If after review of the information submitted, the EPA and/or State require UHCL's SPCC Plan to be amended, UHCL will submit written information, views, and arguments on the proposed amendment, within 30 days from receipt of such notice. UHCL will also amend their SPCC accordingly, within 30 days following the RA's notice, unless the RA sees good cause and allows a time extension.

1.4 PLAN AMENDMENT BY OWNERS OR OPERATORS

§112.5 *- If you are the owner or operator of a facility subject to 40 CFR 112, you must*

(a) Amend the SPCC Plan for your facility in accordance with the general requirements in §112.7, and with any specific section of 40 CFR 112 applicable to your facility, when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in §112.1(b). An amendment made under this section must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

(b) Notwithstanding compliance with paragraph (a) of this section, complete a review and evaluation of the SPCC Plan at least once every five years from the date your facility becomes subject to this part; or, if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your 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 as described in §112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the Plan or in a log or an appendix to the Plan.

(c) Except as provided in §112.6, have a Professional Engineer certify any technical amendments to your Plan in accordance with §112.3(d).

UHCL will evaluate and amend the Plan according to the requirements of 40 CFR §112.5 whenever there is a change in the campus 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. UHCL will prepare any amendments required as a result of campus changes within six months of the change, and implement the revised Plan as soon as possible, but not later than six months following the amendment preparation.

In addition to amending the Plan due to campus changes, UHCL will review and evaluate the SPCC Plan at least once every five years. If the plan requires amendment as a result of this review and evaluation, UHCL will amend their 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 from the campus. UHCL will implement the amendment as soon as possible, but not later than six months following any amendment preparation.

UHCL will document completion of the review and evaluation, and indicate as to whether the campus will amend the Plan (see *SPCC Plan Review and Evaluation Record and Review and Amendment Log*, pages v and vi).

UHCL will have a Professional Engineer certify any technical amendments to the Plan, according to 40 CFR §112.3(c).

1.5 DEFINITIONS

The SPCC Rule (40 CFR §112.2) defines oil 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."

Subsection §112.2 contains definitions of terms referred to in Title 40 CFR Part 112 and this SPCC Plan. The most recent version of these definitions is included in this SPCC Plan by reference.

1.6 QUALIFIED FACILITY PLAN REQUIREMENTS

> ***§112.6(a)*** *– Qualified facilities meeting the Tier I applicability criteria in §112.3(g)(1) are subject to the requirements in paragraph (a) of this section. Qualified facilities meeting the Tier II applicability criteria in §112.3(g)(2) are subject to the requirements in paragraph (b) of this section.*

UHCL does not meet the qualified facility qualification criteria in §112.3(g) since the campus has an aggregate aboveground storage capacity of greater than 10,000 gallons (see the bottom of Table 1 for total oil storage volume). Therefore, UHCL may not prepare and self-certify a SPCC Plan for this campus.

2.0 GENERAL REQUIREMENTS FOR SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLANS

> ***§112.7*** *- Include a discussion of your facility's conformance with the requirements listed in 40 CFR 112. If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up.*

This SPCC Plan has been prepared in accordance with good engineering practices and has the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan (See Management Approval Form page vii). The sections of the Plan follow the sequence specified in 40 CFR Part 112.

2.1 CONFORMANCE WITH §112.7(A) REQUIREMENTS

2.1.1 Discussion of General Facility Conformance with 40 CFR Part 112

> ***§112.7(a)(1)*** *- Include a discussion of your facility's conformance with the requirements listed in 40 CFR 112.*

UHCL prepared this SPCC plan in conformance with EPA's final SPCC Plan requirements found at 40 CFR Part 112 (65 FR 47145), published July 17, 2002, effective August 16, 2002)[4], including May 25, 2004 clarifications[5] (69 FR 29728), December 26, 2006 (71 FR 77266)[6], December 5, 2008 (73 FR 74235) and November 5, 2009 (74 FR 58784)[7] amendments to the SPCC Rule.

[4] Compliance deadline extensions at 71 FR 8462 (February 17, 2006), 72 FR 27443 (May 16, 2007), 74 FR 29136 (June 19, 2009) and 75 FR 63098 (October 14, 2010) do not apply to this facility because it was in operation on or before August 16, 2002.

[5] On May 25, 2004 (69 FR 29728), EPA provided clarifications to the SPCC Rule related to the meaning of "loading rack", "impracticability", "produced water", and "facility" as part of partially settled litigation over the SPCC rule.

[6] The December 26, 2006 amendments became effective on February 26, 2007.

[7] The December 5, 2008 and November 5, 2009 amendments became effective on January 14, 2010.

2.1.2 Deviations From Requirements

> ***§112.7(a)(2)*** *- Comply with all applicable requirements listed in this part. Except as provided in §112.6, your Plan* ***may deviate*** *from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part,* ***except*** *the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure.*
>
> *Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in §112.4(d) and (e).*

As required by the SPCC Rule, the SPCC Plan does not contain deviations from the secondary containment requirements in paragraphs:

- §112.7 (c) regarding general secondary containment,
- §112.7 (h)(1) regarding secondary containment for oil loading/unloading racks,
- §112.8(c)(2) regarding secondary containment for bulk oil storage containers, or
- §112.8(c)(11) regarding secondary containment for mobile or portable oil containers.

The SPCC Plan also contains no deviations from paragraphs §112.7(g), §112.7(h)(2) and §112.7(h)(3), and §112.7(i) and the applicable requirements in §112.8 other than §112.8(c)(2) or §112.8(c)(11).

2.1.3 Description of Facility

> ***§112.7(a)(3)*** *- Describe the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes.*

Facility General Information

Name of Facility: UHCL
Physical Address: 2700 Bay Area Blvd.
Houston, Texas 77058

Mailing Address: 2700 Bay Area Blvd.
Houston, Texas 77058

Type of Facility: University campus, research, teaching and support services

Facility Latitude: 29 Degrees, 35 Minutes, 3 Seconds North
Facility Longitude: 95 Degrees, 05 Minutes, 56 Seconds West

Figure 1 provides a United States Geological Survey (USGS) topographic map depicting the facility's general location.

Facility Description

UHCL is a research and teaching facility whose support activities include fueling, maintenance, and associated oil handling operations. UHCL is located approximately 20 miles south east of downtown Houston, Texas, four (4) miles east-northeast of Interstate Highway 45 at 2700 Bay Area Boulevard, in the Clear Lake region of Houston, Harris County, Texas. The campus is comprised of green space, parking and drive areas, support buildings, and the following major buildings: Facilities Maintenance and Construction (FMC), North Office Annex, Student Services Classroom and Central Plant, Bayou, Delta, and Arbor. Adjacent land uses includes an undeveloped land and an office complex to the north; a high school, fast food restaurant, and police department to the west; an office complex to the south; and Horsepen Bayou and undeveloped land owned by the Clear Lake Water Authority to the east. The topography of the campus and the surrounding property is relatively flat.

Figure 1 shows the campus location. Figure 2 depicts the campus layout and the location of oil storage containers subject to the SPCC Rule.

Stormwater runoff from the campus flows to stormwater retention ponds that discharge into Horsepen Bayou. Stormwater runoff directions from the campus are shown on Figure 2.

2.1.3.1 Description of Oil Storage

> ***§112.7(a)(3)(i)*** *– Address the type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities;*

Oils stored at the campus include vehicle fuels, various hydraulic, lube, motor, and used oils utilized in campus equipment, elevators, and vehicles; as well as used cooking grease from the on-campus cafeteria. In addition, some campus transformers contain 55 or more gallons of oil. Oils stored at the campus in containers having a capacity equal to or exceeding 55-gallons include:

Oil storage containers, including:

- 55-gallon drums,
- diesel emergency generator tanks,
- used oil tank, and
- a split tank for vehicle refueling containing both diesel and gasoline.

Oil-filled equipment including:

- elevator hydraulic oil tanks, and
- electrical transformers.

In addition to transformers owned and operated by UHCL which contain 55 or more gallons of oil, there also are several additional transformers which do not contain oil and therefore are not subject to this SPCC Plan.

UHCL does not store oil in either bunkered or buried tanks.

Tables 1 through 3 provide a listing and location of bulk oil storage containers and equipment at the campus that have an oil storage capacity of 55 or more gallons. The tables identify the type of storage vessel, the oil storage capacity, the type of oil, containment provisions, direction of discharge flow etc. The locations of all oil-containing units subject to the SPCC rules are depicted in Figures 2A through 2E.

2.1.3.2 Discharge Prevention Measures

> ***§112.7(a)(3)(ii)*** *- Address discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);*

Facilities and procedures employed at the campus for spill prevention include:

- Oil loading and unloading performed using procedures designed to minimize the occurrence of spill incidents (see below)
- Original design of equipment to prevent spilled material from escaping (e.g., high liquid level alarms, pump cut-offs, secondary containments, spill collection sumps, etc.) (see below)
- Routine visual inspections of all oil containers, piping, joints, unions, valve and pump seals and bodies, pipe supports and metal surfaces. Inspections performed in accordance with written instructions, by a person responsible for spill prevention. (see Section 2.5)
- Training of campus personnel and on-site contractors on proper oil handling procedures (see Section 2.6)
- A stormwater drainage system that allows for the control of spilled material prior to discharge as described in 40 CFR §112.1(b) (see Section 2.1.3.3)

Oil Loading and Unloading Procedures:

Bulk Delivery Procedures

Precautions are taken to ensure both personnel safety and prevention of spills or accidental releases during routine handling of oil. Visual checks for leaks before, during, and after material transfers provide operating personnel with the opportunity to contain releases due to faulty equipment, and to implement proper repair measures. UHCL employs delivery procedures designed to prevent accidental spills and releases during the bulk transfer of oils and other materials. Bulk oil is delivered using the following procedures:

- Loading and unloading is only performed under the supervision of campus personnel responsible for ensuring that proper procedures are followed.
- Oil absorbent and containment materials must be available and sufficient to prevent spills from reaching navigable waters.
- Wheel chocks or a vehicle break interlock system must be employed to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines or hoses.
- Bonding and grounding devices must be connected before loading or unloading flammable oils from vehicle.
- Campus personnel and pump operator/driver must check all connections for tightness and that all fittings and hoses are in a safe and operable condition before beginning any pumping of oil.
- Where connections are not located within a secondary containment structure, a drip pan must be placed below the connection during the filling process.
- The operator of the pump shall not leave the pumping process unmanned for any reason during the filling process and shall remain within close proximity (five feet) of the shutoff valve at all times.
- When a high level alarm is not operational or available on the container being filled, an employee must gauge the container during filling operations and be in constant communication with the pump operator.
- After pumping is complete, the pump operator must check that all shutoff valves are locked in the closed position and there is no leakage.
- Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles must be closely inspected for discharges, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge.
- Connections of oil tank or campus piping must be securely capped, plugged, or sealed when not in service or when in standby service for an extended time.

Bulk Oil Collection/Pickup

Used petroleum oils generated during maintenance activities transferred by UHCL personnel via 5-gallon pails are placed directly into the FMC used oil storage tank. Collected used oil is periodically picked up via trucks that park adjacent the used oil tank. In general, the operator collects the used oils using a hand-held nozzle and flexible tubing from a vacuum tanker connected directly to the truck.

Container Loading/Unloading Procedures

Portable containers (drums, totes) of oils and oil-based products are generally delivered at the Facilities, Maintenance, and Construction (FMC) Building and the loading area of the Bayou Building. The drums are then taken directly to the point of use by hand cart or fork lift. Delivery to the FMC is through an overhead door leading to the drum storage area. These temporary staging locations are strategically located that in the event of a release during staging, release response equipment would be employed, and the release would be contained as close to the source as possible. Portable containers are loaded and unloaded using the following procedures:

- All containers must be closed and sealed prior to moving.
- No obstacles should block the unloading area or delivery paths.
- Safe lifting techniques must be used.
- Loads must not be stacked on the transport mechanism or vehicle in a manner that blocks the operator's vision.
- Heavy objects should be loaded at the bottom of a forklift, hand truck, or pallet jack.
- Bulky or awkward items should be secured while in transport.
- Only trained and authorized personnel are allowed to operate a forklift or use other powered material-handling equipment.
- Containerized materials are stacked and stored properly in a stable and secure manner.

Elevator Hydraulic Oil Tanks

Oil is rarely added to or removed from these small tanks. When required, addition of oil is performed manually using small containers by qualified, contracted elevator service technicians. Removal of oil would only be required in the event of tank repair or replacement. In this event, oil would be manually removed from the tank by portable pumps and placed in containers.

Electrical Transformers

Typically oil is neither added to nor removed from transformers except in the event of repairs. Addition or removal of oil from transformers is only performed by trained and qualified electricians.

Oil Equipment Design:

Bulk Storage Oil Tanks

All bulk oil storage containers are constructed of materials compatible with petroleum products at the conditions of storage. Visual observations of bulk storage oil tanks are made routinely during normal work operations at UHCL. The construction materials of the aboveground portions of the tanks are examined at least quarterly to detect corrosion or erosion and leaking of fixtures and seams. The area immediately surrounding the tank is patrolled at least quarterly to detect obvious signs of leakage.

Portable or Mobile Oil Containers

All portable or mobile oil containers are constructed of materials compatible with petroleum products at the conditions of storage. In areas where containers of oil, such as drums, are used routinely, there are designated oil container storage locations. Inspections and visual

observations are made routinely during normal work patrols at the campus. The areas used for drum and mobile container storage are inspected regularly to detect obvious signs of leakage. Also, observations are conducted to detect problems with the integrity of the storage pads or stains indicating leaks. Reports are made immediately to the area supervisors. Any leak which is detected is remediated promptly.

Transformers

Transformers generally have significant lifetimes and require infrequent maintenance. Oil leaks in such equipment occur seldom, but usually caused by, or result in, failure of the equipment. When a transformer does not function, it is noticed by a loss of power to significant portions of the building or electrical equipment. This loss of power indicates a problem (outside of inspections) and would cause the facility to diagnose the problem, thereby immediately detecting any transformer oil releases. Transformers are inspected and maintained by a third party contractor in addition to being routinely inspected by campus personnel for maintenance issues and oil leaks.

2.1.3.3 Drainage Controls

> ***§112.7(a)(3)(iii)*** *- Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;*

UHCL provides secondary containment for bulk oil containers and portable oil containers in accordance with the requirements of §112.8. Diversionary controls in accordance with §112.7(c) are provided for all oil filled equipment. The following sections discuss the campus-wide drainage control and control features at specific oil storage locations.

2.1.3.3.1 General Facility Drainage Controls

In the event that oil is spilled outside a secondary containment, runoff would eventually flow to the campus stormwater drainage system. The portion of UHCL north of Horsepen Bayou slopes from the northwest to the south and east, with stormwater runoff discharging through catch basins into an aboveground drainage ditches. Runoff from areas west of Bayou Road discharges into one of three campus retention ponds; Alumni Pond, Alligator Pond, or Duck Pond. Alumni Pond discharges to Duck Pond. Alligator Pond and Duck Pond are located just north of Horsepen Bayou and discharge to the bayou. Except in the event of high rainfall conditions (Alligator Pond and Duck Pond are located within the 100-Yr Flood Plain), the design of the retention ponds is such that a spill entering the stormwater system would be held in the ponds.

The portion of UHCL south of Horsepen Bayou discharges into a retention pond and catch basins which discharge into an underground stormwater drain which discharges into Horsepen Bayou.

While individual secondary containment and spill containment materials are available and will be utilized to retain any released oil as close to the source as possible, the campus's general drainage controls, along with the use of appropriate spill response equipment provide additional support to retain released oil on-site.

2.1.3.3.2 Drainage Controls at Bulk Oil Storage Containers

Bulk oil storage tanks and containers are located both outdoors and indoors. Drainage control is provided for all bulk oil storage tanks. All bulk oil storage tanks and oil container storage areas are provided with secondary containment. The secondary containment areas are drained either via manual drain valves that are kept normally closed, or using pumps that are manually activated.

Drums and totes of oil stored indoors are located on concrete building floor areas sufficient to provide adequate secondary containment for those containers. None of the campus buildings are equipped with floor drains that discharge to the outdoors or to storm sewers in areas where oils are stored.

Campus secondary containment areas for bulk oil storage containers have been sized to contain the entire capacity of the largest single container in the containment and sufficient freeboard to contain precipitation. Calculations for estimated dike and containment sizes have been included in Appendix C.

Stormwater that collects in the secondary containments is only discharged as described in Section 3.2.3.

2.1.3.3.3 Drainage Controls for Oil Filled Mechanical Equipment (Elevators)

Mechanical equipment at the facility with oil capacities greater than 55 gallons are elevators located in the Bayou, Student Services Classroom, and Delta Buildings. The elevator systems are in place and operational, maintenance consists of transferring minimal quantities of make-up oil into the indoor systems on a routine basis.

Each elevator system is made up of a shaft and associated oil reservoir located in a room adjacent to the elevator shaft. In the event of a release, absorbent materials and other spill response equipment are readily available to contain a release as close to the source as possible, if practicable. For releases within the room, the oil would be retained in the room pending cleanup. Due to the nature of the shaft, however, oil released in the shaft would go to the ground at the bottom of the shaft. UHCL personnel will ensure the prompt clean up of such releases.

2.1.3.3.4 Drainage Controls for Oil-Filled Electrical Equipment

The campus has 10 pad-mounted electrical transformers which contain 55 or more gallons of oil and are owned and operated by UHCL and therefore subject to this SPCC Plan. Table 3 lists

the transformers, their location, and describes their installation and direction of flow in the event of a leak. Seven transformers are located indoors in the Central Plant of the Bayou Building. For the transformers in the Central Plant, curbing and the building walls and floor within the transformer room provides sufficient containment for the release from the largest oil-filled transformer. Transformers located outdoors are located on concrete pads. For the transformers located outdoors, sorbent materials and other spill response equipment are readily available in the event of a spill or leak to contain a release as close to the source as possible.

2.1.3.4 Countermeasures for Discovery, Response, and Cleanup

> ***§112.7(a)(3)(iv)*** *- Address countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);*

UHCL has developed a Quick Reference Guide (QRG) outlining emergency procedures for responding to releases. The QRG is located at the beginning of the SPCC Plan. It includes a flow diagram, forms, and information regarding countermeasures for discharge discovery, response, cleanup, and notification.

Any person detecting a release of an oil or hazardous material shall notify the UHCL Risk Management Department, or designee, and give details of the release. Shift personnel are trained to be alert for spills within the campus. Additional internal and agency notifications will be made as described in the QRG.

> *NOTE: If a spill, release, or small fire can* ***safely*** *be stopped by turning off a valve, setting a container upright, using a portable fire extinguisher, etc., then the employee may take such appropriate actions prior to contacting the* Director of Risk Management.

The Risk Management Department will work with the Director(s) of FMC to ensure immediate steps are taken to investigate the release; protect employees from injury; prevent damage to equipment; to eliminate fire hazards; to stop the release; and to contain the flow of oil. Immediate response actions include but are not limited to closing valves, blocking drains with spill mats/booms; placing absorbents around released material; constructing temporary dikes, and utilizing sealants. In the event that an emergency is beyond the control of the campus resources, or there is the potential to affect persons off campus, UHCL has identified a third party contracted cleanup organization to assist in releases beyond UHCL personnel capabilities. See QRG-5 for UHCL's contracted response organization.

Response Actions

In the event of minor spills, personnel are trained to perform minor response and cleanup activities for spills without outside assistance. The Risk Management Department, Facilities Maintenance and Construction, and University Police are all responsible for overall emergency control of activities onsite, assessing potential threats to public safety, and for initiating integrated response actions.

Assess Hazards to Human Health or the Environment

The Risk Management Department, in coordination with the FMC Director(s) will assess the possible hazards to human health or the environment that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated; hazardous surface run-off due to water or chemical agents used to control fire; and heat-induced explosions). The assessment will consider both direct and indirect effects of the release, fire, or explosion. This assessment will include an evaluation of the type of incident, materials involved, toxicity, potential for gas evolution, wind direction, and anticipated weather conditions. In making this assessment, the Risk Management Department will utilize campus records on materials being stored such as safety data sheets (SDS) and/or will utilize area process knowledge.

In the event of an imminent or actual emergency that poses a serious danger, the Risk Management Department will activate the internal campus communications systems to notify all personnel/visitors on the campus to evacuate.

Cleanup and Removal

The Risk Management Department and Director(s) of FMC will confer to determine the appropriate recovery procedures and to assign personnel or contractors to recover the released material. When practical, recovered spilled oil will be drummed or pumped into similar containers. After gross removal of spilled oil, residual liquid will be removed using absorbents and similar materials. Where a spill has occurred on pavement, once all liquids have been removed, residues may be removed from the pavement using steam cleaning or pressure washing with an appropriate detergent. All waste oil, used absorbents, wash water etc. will be collected and characterized for proper disposal.

In the event that a spill is not retained in a containment structure or other device that prevents the spill from migrating toward the stormwater drainage system, temporary measures will be implemented to isolate the spill from the stormwater system. Isolation methods might include, but not be limited to: installation of sewer plugs in a downstream manhole, placement of absorbent materials, and/or spill barriers or sand bags to block or contain the flow until the oil can be collected.

2.1.3.5 Disposal Methods

> ***§112.7(a)(3)(v)*** *- Address methods of disposal of recovered materials in accordance with applicable legal requirements;*

The following subsections discuss the methods of temporary storage, on-site management, and disposal of materials recovered following a spill or release.

2.1.3.5.1 Post-Emergency Equipment Maintenance

After an emergency event, the Risk Management Department will verify that all emergency response equipment is cleaned and restored to pre-accident condition (or replaced as necessary) before operations are resumed in the affected areas of the campus.

The Risk Management Department will set up an appropriate decontamination area. If shipped off site for disposal, all rinse water will be collected, containerized, analyzed, and shipped to an appropriate off-site disposal facility. If shipped off site for disposal, solids will be removed, containerized, analyzed, and shipped to an appropriate off-site disposal facility. Any equipment that cannot be properly decontaminated will also be disposed at an appropriate off-site disposal facility.

2.1.3.5.2 Storage and Treatment of Released Material

The Risk Management Department will make arrangements for storage, treatment, and disposal of recovered materials, contaminated soil or surface water, or any other contaminated material resulting from a release, fire or explosion at the campus.

If necessary, the materials generated during the response action will be sampled and analyzed to determine their classification and compatibility. These materials will then be stored in a container storage area containing compatible wastes prior to off-site shipment.

2.1.3.5.3 Incompatible Waste

The Risk Management Department will ensure that released materials, which may be recovered, are not mixed with incompatible wastes. This evaluation will include, if necessary, a review of the waste material's characteristics specified by any SDSs and/or analytical results.

2.1.3.6 Contact List and Phone Numbers

> ***§112.7(a)(3)(vi)*** *– Provide contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in §112.1(b).*

UHCL's QRG located at the beginning of this SPCC Plan contains campus contacts in QRG-2, regulatory contacts in QRG-3, and UHCL contracted cleanup organizations in QRG-5.

2.1.4 Spill Reporting

> ***§112.7(a)(4)*** *- Unless you have submitted a response plan under §112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in §112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the*

discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in §112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

***§112.4(a)** - Notwithstanding compliance with 40 CFR 112.3, if you are the owner or operator of a facility subject to 40 CFR 112, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in 40 CFR 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in 40 CFR 112.1(b), occurring within any 12-month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section.*

2.1.4.1 Internal Spill Reporting

For any spills or discharge, employees will immediately notify the Risk Management Department. Information relayed should include:

- Location of spill
- Time spill occurred
- Type of material discharged
- Estimates of total quantity discharged
- Source and cause of discharge
- Damages or injuries caused by discharge
- Actions used to stop, remove, & mitigate effects of discharge

Any spill larger than five gallons, but not required to be reported in accordance with Section 2.1.4.2 below, will be documented. An example Incident Report Form is provided in the QRG. Completed Incident Reports will be submitted to the Risk Management Department. Incident Reports will be maintained with the SPCC Plan for a period of three years.

2.1.4.2 Initial External Spill Reporting

The Risk Management Department will contact outside agencies in the event of a spill or discharge described below as soon as possible but not later than **24 hours** after the discovery of the spill or discharge. Information about the release will be recorded on an Incident Report Form (see example form QRG-4). This form will allow the Risk Management Department to have the following information available when calling agencies to report a spill (see QRG for contact information):

- The name, address and telephone number of the campus and the person making the report;
- The date, time, and location of the spill or discharge;

- A specific description or identification of the oil, petroleum product, hazardous substances or other substances discharged or spilled;
- An estimate of the total quantity discharged or spilled;
- An estimate of the quantity discharged to navigable waters [as described in §112.1(b)];
- The duration of the incident;
- A description of all affected media;
- The name of the surface water or a description of the waters in the state affected or threatened by the discharge or spill;
- The cause and source of the discharge or spill;
- A description of the extent of actual or potential water pollution or harmful impacts to the environment and an identification of any environmentally sensitive areas or natural resources at risk;
- A description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge or spill;
- Any known or anticipated health risks;
- Any damages or injuries caused by the discharge;
- Whether an evacuation may be needed;
- The identity of any governmental representatives, including local authorities or third parties, who also have been contacted or are responding to the discharge or spill; and
- Any other information that may be significant to the response action.

Oil Spills which will be reported to the TCEQ and National Response Center:

Spills of oil (including fuels) that meet any of the following criteria will be reported to the Texas Commission on Environmental Quality (TCEQ) and National Response Center (NRC):

Oil Spills onto Land:

- 25 gallons or more of used oil or petroleum products[8],
- 210 gallons or more of crude oil, unused (new) oil, or oil that is not a petroleum product, or
- The quantity designated as the RQ in 40 CFR 302.4 Table 302.4.

Oil Spills into Waters of the State or Navigable Waters of the U.S.:

- Discharges that cause a sheen or discoloration on the surface of a body of water;

[8] Petroleum product – In Texas, a petroleum product is defined as a petroleum substance obtained from distilling and processing crude oil that is liquid at standard conditions of temperature and pressure, and that is capable of being used as a fuel for the propulsion of a motor vehicle or aircraft, including but not necessarily limited to motor gasoline, gasohol, other alcohol blended fuels, aviation gasoline, kerosene, distillate fuel oil, and #1 and #2 diesel. The term does not include naphtha-type jet fuel, kerosene-type jet fuel, or a petroleum product destined for use in chemical manufacturing or feedstock of that manufacturing. 30 TAC 327.2

- Discharges that violate applicable water quality standards; and
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

2.1.4.3 Additional Notification Requirements

Notice to Local Government

If the discharge or spill creates a potential for off-site human exposure, UHCL will immediately notify and cooperate with local emergency authorities [fire department, fire marshal, law enforcement, health authority, or Local Emergency Planning Committee (LEPC), as appropriate]. QRG-2 provides contact and reporting requirements for local agencies. UHCL will cooperate with the local emergency authority in providing support to implement appropriate notification and response actions. The local emergency authorities, as necessary, will implement its emergency management plan, which may include notifying and evacuating affected persons.

Notice to Property Owner(s) or Occupant(s)

As soon as possible, but no later than 2 weeks after the discovery of a spill or discharge, UHCL will reasonably attempt to notify the owner (if identifiable) or occupant of any property upon which the discharge or spill occurred as well as the occupants of any property that UHCL reasonably believes is adversely affected.

Update Notification to the TCEQ

In accordance with 30 TAC 327, UHCL will notify the TCEQ as soon as possible and whenever necessary to provide information that would trigger a change in the response to the spill or discharge. In addition, a written follow-up report must be submitted to the TCEQ within 30 working days of the discovery of a reportable discharge or spill documenting the response actions completed.

EPA Notification Requirements for Large or Multiple Spills

UHCL will submit a written spill report to the EPA Regional Administrator within 60 days if a facility discharges one of the following:

- More than 1,000 U.S. gallons of oil in a single discharge, or
- More than 42 U.S. gallons of oil in each of two discharges, occurring within any 12-month period.

If a spill described above occurs, the following additional information will be recorded on the Incident Report (see QRG-4) and included in the spill report submitted to the EPA:

- The name of the person making the report;
- The maximum storage or handling capacity of the facility and normal daily throughput;
- Corrective actions and counter-measures taken, including a description of equipment repairs and replacements;

- An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- The cause of such discharge; including a failure analysis of the system or subsystem in which the failure occurred;
- Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

This information will be sent to the following address:

USEPA – Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202
Phone: (214) 665-6489

2.1.5 Emergency Procedures Flow Chart

§112.7(a)(5) *- Unless you have submitted a response plan under §112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.*

UHCL's QRG located at the beginning of the SPCC Plan was developed to organize response procedures in a readily usable form. The flow chart, lists, and forms of the QRG summarize the response activities and notification procedures associated with spills at the campus.

2.2 PREDICTION OF DIRECTION, RATE, QUANTITY OF DISCHARGE

§112.7(b) *- Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.*

Tables 1, 2, and 3 provide a list of the bulk oil storage tanks and containers which may contain oil, and oil-filled electrical and operational equipment having an oil storage capacity of 55 gallons or more at the campus. Included in the tables is a prediction of the direction, rate of flow, and total quantity of oil that could be discharged from each container or storage area as a result of major equipment failure at the campus. Tables 1, 2, and 3 also present spill prediction information for spills and potential failures at dispensing equipment, and bulk loading and unloading areas. For bulk loading connections, the total most probable release is assumed to

be 500 gallons, at a rate of 150 gpm. For dispensing equipment, the most probable release is assumed to be 1 gallon, at a rate of 5 gpm.

2.3 PROVISIONS FOR APPROPRIATE CONTAINMENT AND/OR DIVERSIONARY STRUCTURES

§112.7(c) *- Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b) except as provided in paragraph (k) of this section for qualified oil-filled operational equipment. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:*

(1) For onshore facilities:
- *(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;*
- *(ii) Curbing or drip pans;*
- *(iii) Sumps and collection systems;*
- *(iv) Culverting, gutters, or other drainage systems;*
- *(v) Weirs, booms, or other barriers;*
- *(vi) Spill diversion ponds;*
- *(vii) Retention ponds; or*
- *(viii) Sorbent materials.*

UHCL provides containment and/or diversionary structures or equipment to prevent a discharge as described in 40 CFR §112.1(b) using general campus topography and drainage, constructed containment, buildings, and spill control equipment and response procedures.

In addition to secondary containment structures at each bulk oil storage location, discharges from most campus areas would flow to one of the campus stormwater retention ponds as described in Section 2.1.3.3.

The specific containment and/or diversionary structures or equipment used for each of the campus's oil sources (bulk containers and oil-filled operational equipment) are shown in Tables 1, 2, and 3.

2.4 CONTAINMENT AND/OR DIVERSIONARY STRUCTURES NOT PRACTICAL

§112.7(d) *– Provided your Plan is certified by a licensed Professional Engineer under §112.3(d), or, in the case of a qualified facility that meets the criteria in §112.3(g), the relevant sections of your Plan are certified by a licensed Professional Engineer under §112.6(d), if you determine that the*

installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §112.8(c)(2), §112.8(c)(11), §112.9(c)(2), §112.10(c), §112.12(c)(2), §112.12(c)(11), §112.13(c)(2), and §112.14(c) to prevent a discharge as described in §112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under §112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of this chapter.
(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

UHCL will comply with all required containment and diversionary structure measures. Therefore, this paragraph and the requirements for a written contingency plan and commitment of resources are not applicable.

2.5 INSPECTIONS, TESTS, AND RECORDS

§112.*7(e) - Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*

Oil storage containers, elevators, and transformers are routinely inspected per SPCC requirements as well as per routine business practice. Example inspection forms are provided in Appendix C. Upon finishing the inspection, the inspector completes and signs the appropriate form. The records are signed by the appropriate inspector and are maintained for a period of three years. Details of these inspections and corrective action taken in response to issues found during inspection are included below. In addition, certified integrity testing for bulk oil storage containers is performed as described in Section 3.2.6. Details of these inspections and corrective action taken in response to issues found during inspection are included below.

2.5.1 Oil Storage Container Inspections and Corrective Action

All oil storage tanks, portable oil storage containers are inspected quarterly per SPCC requirements as well as per routine business practice by FMC personnel. Integrity testing for bulk oil storage containers is performed as described in Section 3.2.6.

If the inspection reveals an issue with the integrity of the tank, container, or containment that could result in a release of oil, including, but not limited to leaking seams, gaskets, flanges, piping, pumps, valves, rivets, and bolts, the inspector will take immediate action correct the deficiency, and record the action. In the event the deficiency is beyond the inspector's ability to correct, he or she will notify the FMC Supervisor who is responsible for submitting a work order.

The work order number will be included on the work order. The FMC Department will conduct the repair (or have a third-party contractor conduct the repair) and then close out the work order. The completed work order will be maintained in the FMC Work Order System or shared electronic records with FMC and Risk Management for a minimum of three years.

If the inspection reveals accumulated stormwater in the containment, FMC personnel will visually inspect the water for oil (floating oil or a sheen), and will release the stormwater in accordance with the provisions of Section 3.2.3. Upon emptying the containment, FMC personnel will complete and sign the *Record of Discharge from Secondary Containment* form, in Appendix A and submit the form to the Risk Management Department. The Director(s) of FMC will maintain drainage reports in FMC records and will provide a copy to the Risk Management Department. If inspection reveals the presence of oil in the stormwater requiring off-site disposal, the inspector will notify the Director(s) of FMC who will issue a work order for a third-party service to properly dispose of the water. The Director(s) of FMC will oversee the contractor emptying containment, confirm the proper location of the contaminated water's disposal, and close out the work order. The completed work order will be maintained in the FMC Work Order System or shared electronic records with RM for a minimum of three years.

The emergency generators ~~fuel tanks~~ are operated and tested monthly by FMC personnel. In addition, third party contractors conduct quarterly inspections of the generators. Records of monthly testing and operation and quarterly third-party inspections are maintained in the FMC Work Order System for a minimum of three years.

2.5.2 Oil-Filled Equipment (Elevators) Inspections and Corrective Action

The Bayou Building, Student Services Classroom Building, and Delta Building elevators are the only oil-filled equipment with an oil capacity greater 55-gallons at UHCL (see Table 2). FMC is responsible for elevator maintenance with the help of experienced third party elevator contractors. If an inspection reveals an issue with the elevator, FMC will contact the contracted third party elevator company to take action to correct the deficiency. FMC will record the corrective action with the Work Order documentation. Records of inspections, maintenance and repairs by third-party contractors are retained within the FMC Work Order System for a minimum of three years.

Finally, all elevators are inspected annually by a State inspector. Any deficiencies noted by the State inspector are immediately corrected, and actions taken are recorded, submitted to the State, and maintained in the FMC Work Order System for a minimum of three years.

2.5.3 Transformer Inspections and Corrective Action

Transformers generally have significant lifetimes and require infrequent maintenance. Oil leaks in such equipment occur seldom, but if undetected can result in complete failure of the equipment. When a transformer does not function, it is noticed by a loss of power to significant portions of the building or electrical equipment. This loss of power indicates a problem (outside

of inspections) and would cause the facility to diagnose the problem, thereby immediately detecting any transformer oil releases.

Campus transformers are managed and operated by the FMC and a third party contractor. In addition to SPCC inspections, FMC conducts a number of readings/inspections on transformers as part of UHCL's routine Preventive Maintenance Program. In the event the inspection reveals a deficiency, FMC takes immediate action to correct the deficiency.

In addition to the routine FMC inspection, transformers are also inspected and maintained by a third-party under contract. Under this contract, UHCL's contractor inspects and tests the transformers, checking the oil and conducting routine maintenance, yearly. Finally, insulation infrared testing and oil integrity testing is performed on the electrical equipment at least every five years. Records or third-party inspection, maintenance, and repairs are maintained in the FMC Work Order system for three years.

2.6 PERSONNEL, TRAINING, AND DISCHARGE PREVENTION PROCEDURES

2.6.1 Personnel Training

> ***§112.7(f)(1)*** *- At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.*

Oil-handling personnel are trained with regard to their SPCC Plan responsibilities relative to their job descriptions. Personnel are instructed in the operation and maintenance of equipment to prevent discharges of oil, discharge procedure protocols; applicable pollution control laws, rules, and regulations; general campus operations; and, the contents of the campus SPCC Plan (including the use of the QRG). Training for oil-handling personnel will be performed annually as described in Section 2.6.3.

2.6.2 Person Accountable For Discharge Prevention

> ***§112.7(f)(2)*** *- Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.*

At UHCL, the Director of Risk Management is the designated person who is accountable for discharge prevention and reports directly to UHCL management. The Director(s) of FMC reports to the Director of Risk Management on all issues related to SPCC inspections and corrective actions, as well as discharge prevention.

Responsibilities of the Director of Risk Management include:

- Informing personnel of the applicable pollution laws, rules and regulations affecting the facility;
- Instructing personnel to operate equipment in such a manner so as to prevent spills;
- Maintaining a complete copy of the SPCC Plan at the facility;
- Ensuring that the SPCC plan is developed and implemented;
- Updating the SPCC Plan if significant changes occur at the facility or a minimum of every 5 years;
- Developing, updating, and ensuring implementation of UHCL's related QRG and SPCC Plan; and
- Ensuring emergency response equipment and supplies are in place (e.g., ensures maintenance keeps appropriate supplies stocked).

2.6.3 Personnel Training and Schedule

> ***§112.7(f)(3)*** *- Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.*

UHCL will schedule and conduct discharge prevention briefings for oil-handling personnel at least once per year to assure that they have an adequate understanding of the campus SPCC Plan, its requirements, and their responsibilities. These briefings will highlight known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

2.7 SECURITY

> ***§112.7(g)*** *– Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valve: prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.*

In general, areas that contain oil are either located indoors, or within a chain link security fence when the facility is not in operation. The FMC building, generator, and gasoline and diesel tanks and dispenser are located behind a gate which is closed and locked during non-operational hours. Drums containing oil are maintained in locked buildings, areas, or rooms, accessed only by UHCL authorized personnel. UHCL Police patrol the campus 24 hours a day and would detect the tampering of such equipment.

If equipped with them, drain valves on the secondary containment areas are always kept in the closed position except when in operation. All stormwater pumps and containment drain valves are manually operated and monitored during use.

2.7.1 Pump Starter Controls

All bulk oil container pump starter controls are accessible only to authorized personnel and/or are locked in the closed position when not in use. All pump starter controls and valves are designed to respond in the fail-safe position in the event of a power outage. Vehicle fuel dispensers are secured within a locked fence when unattended.

2.7.2 Loading/Unloading Connections Not In Service

All campus oil storage containers are loaded or unloaded directly through fill ports rather than via pipeline connections.

2.7.3 Lighting

Facility lighting provides sufficient illumination for the discovery of spills and deters vandalism.

2.8 FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

§112.2 *– Definitions*
Loading/unloading rack means a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm, and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices.

§112.7*(h) – Facility tank car and tank truck loading/unloading rack*

(1) Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading rack. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in the area adjacent to a loading/unloading rack to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

The campus does not have any loading/unloading racks. Therefore, this paragraph does not apply.

2.9 REQUIREMENTS FOR FIELD-CONSTRUCTED ABOVEGROUND CONTAINERS

§112.7(i) *- If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.*

There are no field-constructed containers at the UHCL. Therefore, this paragraph does not apply.

2.10 CONFORMANCE WITH OTHER APPLICABLE REQUIREMENTS

§112.7(j) *- In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.*

As discussed in Section 1.0 of this Plan, UHCL is also subject to the State of Texas regulations on spill response in 30 TAC 327, as well as any response and reporting requirements for hazardous substances.

2.11 QUALIFIED OIL-FILLED OPERATIONAL EQUIPMENT

§112.7(k) *- Qualified Oil-filled Operational Equipment. The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this sub-section may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this sub-section in lieu of general secondary containment required in paragraph (c) of this section.*

(1) Qualification Criteria—Reportable Discharge History: The owner or operator of a facility that has had no single discharge as described in §112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in §112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war or terrorism); and

(2) Alternative Requirements to General Secondary Containment. If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must:

(i) Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and

(ii) Unless you have submitted a response plan under §112.20, provide in your Plan the following:

(A) An oil spill contingency plan following the provisions of part 109 of this chapter.

(B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

UHCL has not had a reportable spill as described in 40 CFR §112.7(k)(1) and therefore meets the qualification criteria for implementing the alternative requirements for general secondary containment for Qualified Oil-filled Operational Equipment. However, secondary containment meeting the requirements of 112.7(c) is provided for all oil-filled operational equipment (see Section 2.3). Therefore, no alternative secondary containment is proposed for this facility.

3.0 SPCC PLAN REQUIREMENTS FOR ONSHORE FACILITIES

§112.8(a) *- Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.*

The UHCL campus is an existing onshore facility and is in conformance with the regulatory requirements of 40 CFR §112.7 and 112.8.

3.1 FACILITY DRAINAGE

3.1.1 Drainage from Diked Storage Areas

§112.8(b)(1) *- Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.*

See Section 2.1.3.3 for a description of the general drainage conditions at the campus.

Each of the oil secondary containment structures at the campus are equipped with manually operated open/close type valves or manually operated pump systems to remove liquid accumulations. All pumps and valves remain in the closed or off position unless manual stormwater evacuation is being conducted.

All oil storage containers at the facility are either double-walled or are located indoors or under cover such that they are not exposed to storm water. If oils or other liquids collect within a tank interstitial space or secondary containment structure, the liquid will be removed and disposed of off-facility at an authorized facility. Records of discharges will be maintained using the form "*Record of Discharge from Secondary Containment."* An example form is provided in Appendix A.

3.1.2 Drain Valve Design / Drainage of Retained Stormwater

§112.8(b)(2) *- Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained storm water, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.*

All oil storage containers at the facility are either double-walled or are located indoors or under cover such that they are not exposed to storm water. All secondary containment structures that

are equipped with drain values have valves of the manual, open-and-close design (see Section 3.1.2). UHCL does not use flapper-type valves to drain secondary containment structures.

3.1.3 Drainage System Design for Undiked Bulk Storage Areas

> ***§112.8(b)(3)*** *- Design 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) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.*

Undiked areas of the facility associated with oil transfer, such as the used oil pickup area, which are all located outside secondary containment structures, will be controlled by sorbents, drip pans, and/or other emergency equipment to prevent a discharge as described in 40 CFR 112.1(b).

3.1.4 Diversion Systems for Undiked Areas

> ***§112.8(b)(4)*** *- If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.*

Campus drainage is engineered as per §112.8(b)(3). Therefore, this paragraph does not apply.

3.1.5 Dual Reliability for Treatment Units

> ***§112.8(b)(5)*** *- Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.*

Drainage water from oil storage areas are not treated at UHCL. Therefore, this paragraph does not apply.

3.2 BULK STORAGE CONTAINERS

3.2.1 Storage of Compatible Materials

> ***§112.8(c)(1)*** *- Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.*

Bulk oil storage containers are designed and constructed in accordance with industry standards and are compatible with the materials being stored. All 55-gallon containers used for storage of oils are Department of Transportation (DOT) approved.

3.2.2 Bulk Storage Containment Design

> ***§112.8(c)(2)*** *- Construct all bulk storage container installations (except mobile refuelers[9] and other non-transportation-related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.*

All bulk oil storage tanks at the UHCL are double-walled and therefore have been designed with secondary containment to contain the entire capacity of the largest oil storage tank in the containment, and for tanks exposed to rainfall, sufficient freeboard for precipitation using the 25-year, 24-hour rainfall event, taking into account displacement volumes of other tanks in the containment. Also see Sections 2.1.3.3 and 2.3.

All 55-gallon containers and other portable containers used for storage of oils are either stored inside buildings and located on concrete floors which provide adequate containment and/or are provided with additional secondary containment structures. Table 1 lists typical numbers of portable containers stored at the campus and the type of containment provided.

3.2.3 Drainage of Uncontaminated Rainwater

> ***§112.8(c)(3)*** *- Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:*
> *(i) Normally keep the bypass valve sealed closed.*
> *(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b).*
> *(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and*

[9] 112.2 - *Mobile refueler* means a bulk storage container onboard a vehicle or towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container.

2005 SPCC Guidance for Regional Inspectors: When mobile containers are involved in activities such as normal fuel transfer, on-site movement, or preparation for such activities in "stand-by" mode, the requirements of §112.8(c)(11) do not apply because the container is not "positioned" and therefore the less stringent requirements of §112.7(c) apply. In these cases, a member of the facility personnel should be in physical control and attending to the mobile or portable storage container. When the mobile refueler is not engaged in one of the activities listed above, it must be positioned to prevent a discharge and provided with secondary containment large enough for the single compartment or container with sufficient freeboard for precipitation (§112.8(c)(11)).

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§122.41(j)(2) and 122.41(m)(3) of this chapter.

All oil storage containers at the facility are either double-walled or are located indoors or under cover such that they are not exposed to storm water. Therefore, the requirements of this paragraph do not apply.

3.2.4 Requirements for Completely Buried Metallic Tank

§112.8(c)(4) *- Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.*

There are no buried tanks which contain oil at the campus. Therefore, this paragraph does not apply.

3.2.5 Requirements for Bunkered Tanks

§112.8(c)(5) *- Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.*

There are no bunkered tanks which contain oil at the campus. Therefore, this paragraph does not apply.

3.2.6 Integrity Testing Requirements for Aboveground Containers

§112.8(c)(6) *– Test or inspect each aboveground container for integrity on a regular schedule, and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency of and type of testing must take into account container size, configuration, and design (such as containers that are shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*

UHCL will inspect its bulk oil tanks in accordance with the industry standards outlined in the Steel Tank Institute's (STI) Standard for "Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids" - SP001.

All of the campus' bulk oil storage containers have a capacity less than 5,000 gallons and are either elevated or located within secondary containments. In accordance with SP001, the following inspections and testing will be implemented to satisfy the requirements of 40 CFR §112.8(c)(6):

- Visual external inspection of tank by UHCL's inspector at the frequency specified in Section 2.5 of this Plan.
- Plastic portable containers must be replaced at least once every 7 years
- Steel portable containers must be replaced at least once every 12 years.
- Further integrity testing is not required to be performed on these tanks and containers.

Records of inspections will be kept in Appendix C.

3.2.7 Requirements for Internal Heating Coils

> ***§112.8(c)(7)*** *- 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.*

There are no heated oil storage tanks at the campus. Therefore, this paragraph does not apply.

3.2.8 Controls to Prevent Discharges from Containers

> ***§112.8(c)(8)*** *- Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:*
>
> *(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.*
> *(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.*
> *(iii) Direct audible or code signal communication between the container gauger and the pumping station.*
> *(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.*
> *(v) You must regularly test liquid level sensing devices to ensure proper operation.*

Most bulk storage containers at the campus are equipped with visual sight tubes, level gauges, or level transmitters to facilitate determinations of container contents and to prevent overfilling or

other accidental discharges. The controls that are provided on campus bulk oil containers to avoid discharges are listed on Table 1. Such overfill devices are routinely inspected/tested by UHCL personnel as part of routine maintenance and inspection to ensure proper operation.

A few of the relatively small tanks that are filled on an infrequent basis are not equipped with engineered spill overfill protection. For these tanks, vendors and/or UHCL personnel maintain constant contact during delivery and follow procedures as outlined in Section 2.1.3.2 to gauge the tank prior to filling and visually monitor tank capacity during oil delivery. Because the capacity of the secondary containment for each of these tanks is sufficient to contain the entire contents of the largest oil storage tank in the containment, these measures are considered appropriate to providing equivalent environmental protection considering the capacity of the containers.

The method of level determination for each bulk oil storage tank is listed in Table 1.

3.2.9 Requirements for Observing Treatment Facility Effluent

> ***§112.8(c)(9)*** *- Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b).*

Wastewater effluent from the campus is discharged to the municipal sanitary sewer in accordance with the campus' municipal pre-treatment permit. Stormwater discharges from the campus are not treated prior to discharge.

3.2.10 Prompt Correction of Discharges from Containers

> ***§112.8(c)(10)*** *- 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. You must promptly remove any accumulations of oil in diked areas.*

Inspections and corrective action for oil storage containers and oil-containing equipment are conducted in accordance with written procedures developed for the campus as discussed in Section 2.5. Secondary containments are checked for accumulations of oil and/or abnormal operating conditions. Leaks from such items as seams, gaskets, piping, pumps, valves, rivets, and bolts are promptly repaired. Oil within a secondary containment is promptly removed.

Measures will be taken promptly to remove any accumulations of oil in secondary containment areas or other areas and to minimize and mitigate any visible oil leaks that are discovered. Absorbent pads, drip pans, or other materials are located convenient to areas of oil storage and are placed under work in progress to capture any minor spills or leaks while dismantling equipment, piping and valves outdoors.

3.2.11 Mobile or Portable Containers

> ***§112.8(c)(11)*** *- Position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b). Except for mobile refuelers, and other non-transportation-related tank trucks, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.*

All mobile or portable oil storage containers are provided with the secondary containment sufficient to contain the capacity of the largest single compartment or container. All mobile and portable oil storage containers at the facility are either located indoors or under cover such that they are not exposed to storm water.

The campus does not operate any mobile refuelers or other non-transportation related tank trucks. Secondary containment methods are further discussed in Section 2.1.3.3.2, 3.2.2, and Table 1.

3.3 TRANSFER OPERATIONS

3.3.1 Requirements for Buried Piping

> ***§112.8(d)(1)*** *- Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.*

UHCL does not have any buried piping at the campus that is subject to these requirements at this time. Piping from the FMC diesel/gasoline vehicle fuel tank to the dispenser is located aboveground. Any buried oil piping installed in the future will be provided with a protective wrapping and coating and will be cathodically protected. If a section of buried line is exposed for any reason, campus personnel will carefully inspect it for deterioration and will undertake appropriate corrective action in the event corrosion damage is indicated.

3.3.2 Requirements for Capping or Blank-Flanging Connections

> ***§112.8(d)(2)*** *- Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.*

UHCL will securely cap or blank-flange and mark the origin of terminal connections of oil pipelines when they are not in service or when they are in standby service for an extended time.

3.3.3 Requirements for Pipe Support Design

§112.8(d)(3) *- Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.*

Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. Pipe supports are inspected in conjunction with tank visual inspections as described in Section 2.5.

3.3.4 Requirements for Inspection of Aboveground Piping

§112.8(d)(4) *- Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.*

Aboveground piping, valves, and appurtenances are inspected in conjunction with tank visual inspections as described in Section 2.5. An example periodic SPCC inspection form is provided in Appendix C.

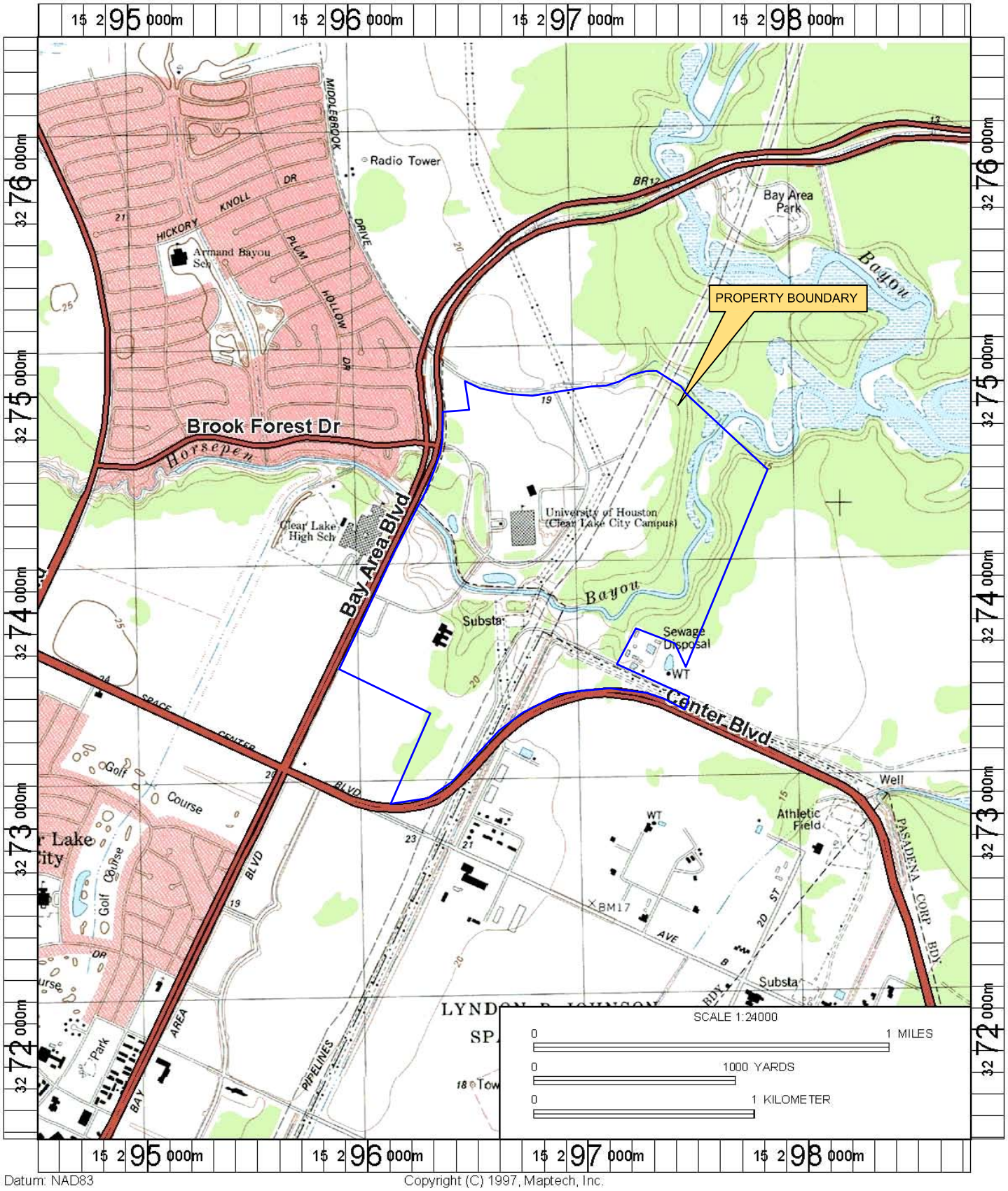
3.3.5 Requirements for Vehicles Warnings

§112.8(d)(5) *- Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.*

Aboveground oil transfer piping to the vehicle fuel dispenser is protected by fencing and concrete bollards and therefore not accessible to vehicles. Loading and unloading procedures are discussed in Section 2.1.3.2.

4.0 SUBSTANTIAL HARM CRITERIA CHECKLIST

In accordance with the requirements of 40 CFR §112.20, facilities are required to determine whether their facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines. A certification of the applicability of the Substantial Harm Criteria is required to be incorporated into the SPCC Plan. This certification is provided in Appendix D.



Datum: NAD83

DIGITAL U.S.G.S. 7.5 Minute Series:
–League City, TX Quadrangle (1982)
MAP SOURCE: Terrain Navegator Pro

QUADRANGLE LOCATION

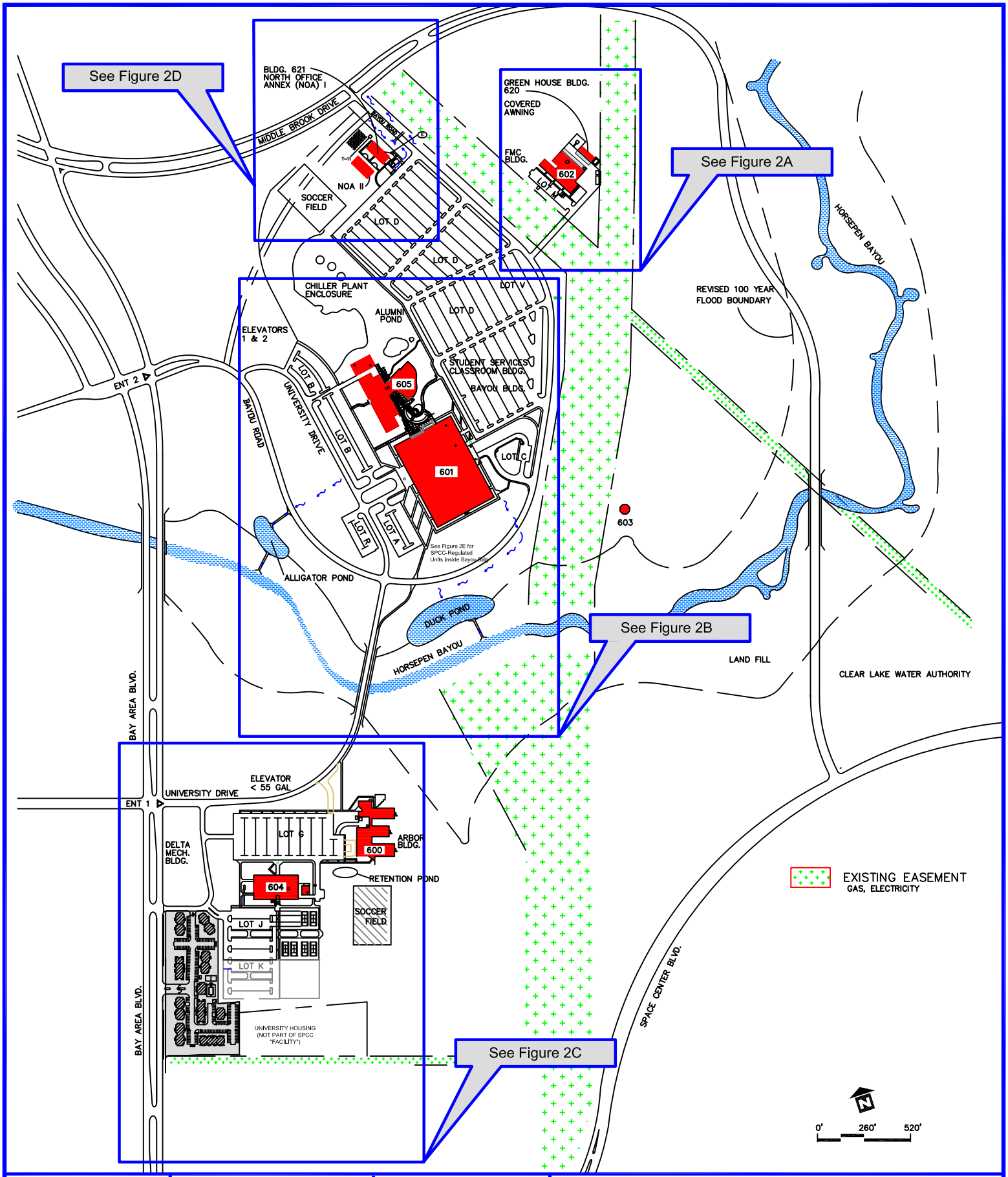
zephyr

FIGURE 1

Site Location Map

University of Houston Clear Lake
2700 Bay Area Blvd
Houston, Texas 77058

Designed by:	Project No.:	Filename	Date:
RvC	08229	AreaMAP	04/07/14



LEGEND

0600 ARBOR BUILDING
0601 BAYOU BUILDING
0602 FMC
0603 ARBOR ART STORAGE
0604 DELTA BUILDING
0620 GREEN HOUSE
0621 NORTH OFFICE ANNEX
0605 STUDENT SERVICE
EXISTING BUILDINGS

SITE
LOCATION

zephyr

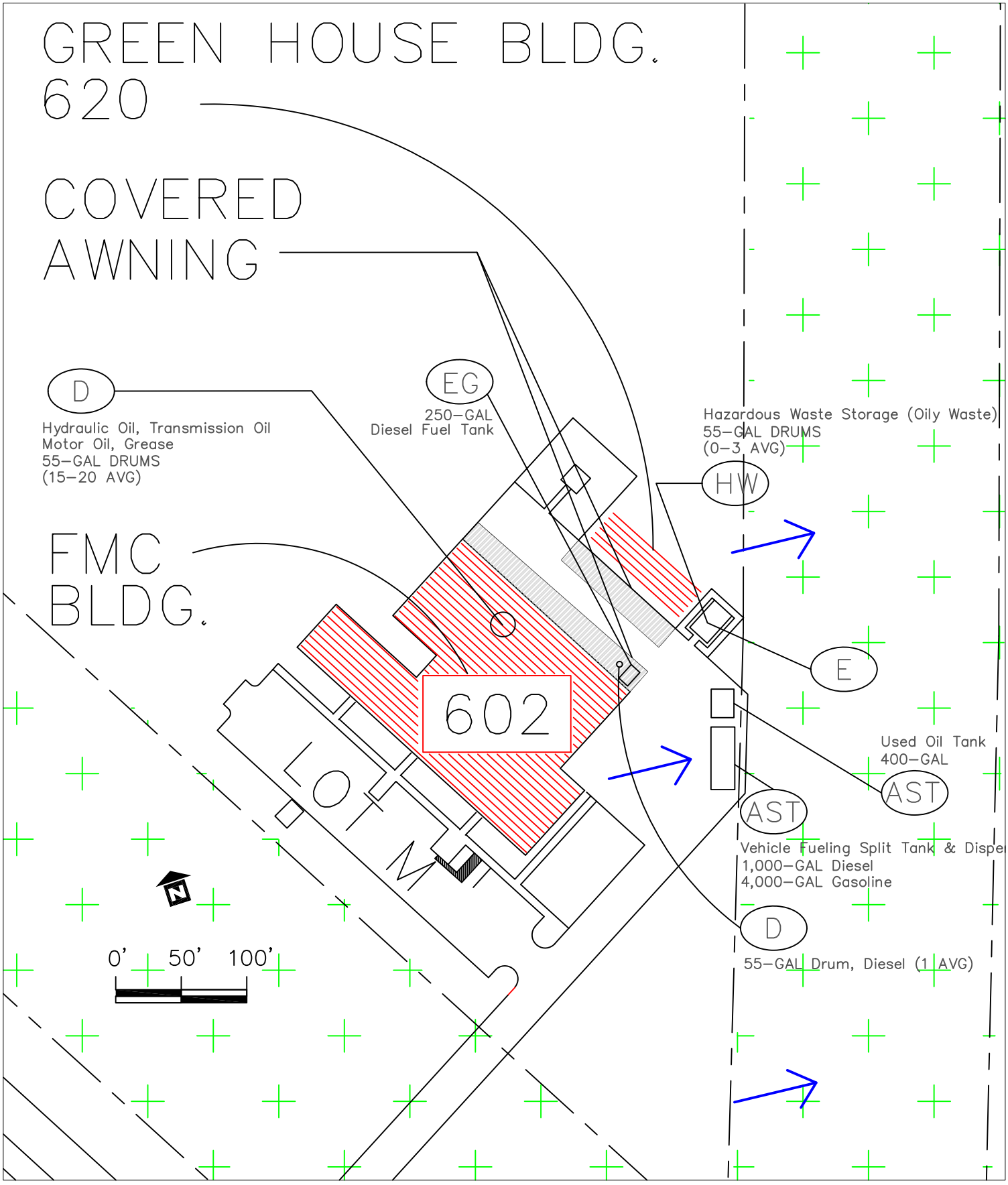
FIGURE 2 – OVERALL SITE MAP

UNIVERSITY OF HOUSTON–CLEAR LAKE

Spill Prevention, Control and Countermeasure Plan

Filename: H:\University of Houston - Clear Lake\13366 - UHCL 2013 SPCC Plan Finalization\2013 UHCL SPCC Plan

Designed by:	Project No.:	Revised by:	Checked by:	Revision Date:
RvC	013366	MGB	RDC	04/07/2014



LEGEND

0600 ARBOR BUILDING
0601 BAYOU BUILDING
0602 FMC
0603 ARBOR ART STORAGE
0604 DELTA BUILDING
0620 GREEN HOUSE
0621 NORTH OFFICE ANNEX
0605 STUDENT SERVICE
EXISTING BUILDINGS

SPCC Plan Notes

→ Surface Flow Direction
T – XX Transformer
(E) Emergency Response Equipment
(AST) Aboveground Storage Tank
(EG) Emergency Generator
(D) Drum Storage Area
(HW) Hazardous Waste Storage Area

zephyr

FIGURE 2A – FACILITIES, MAINTENANCE & CONSTRUCTION (FMC)

UNIVERSITY OF HOUSTON–CLEAR LAKE

Spill Prevention, Control and Countermeasure Plan

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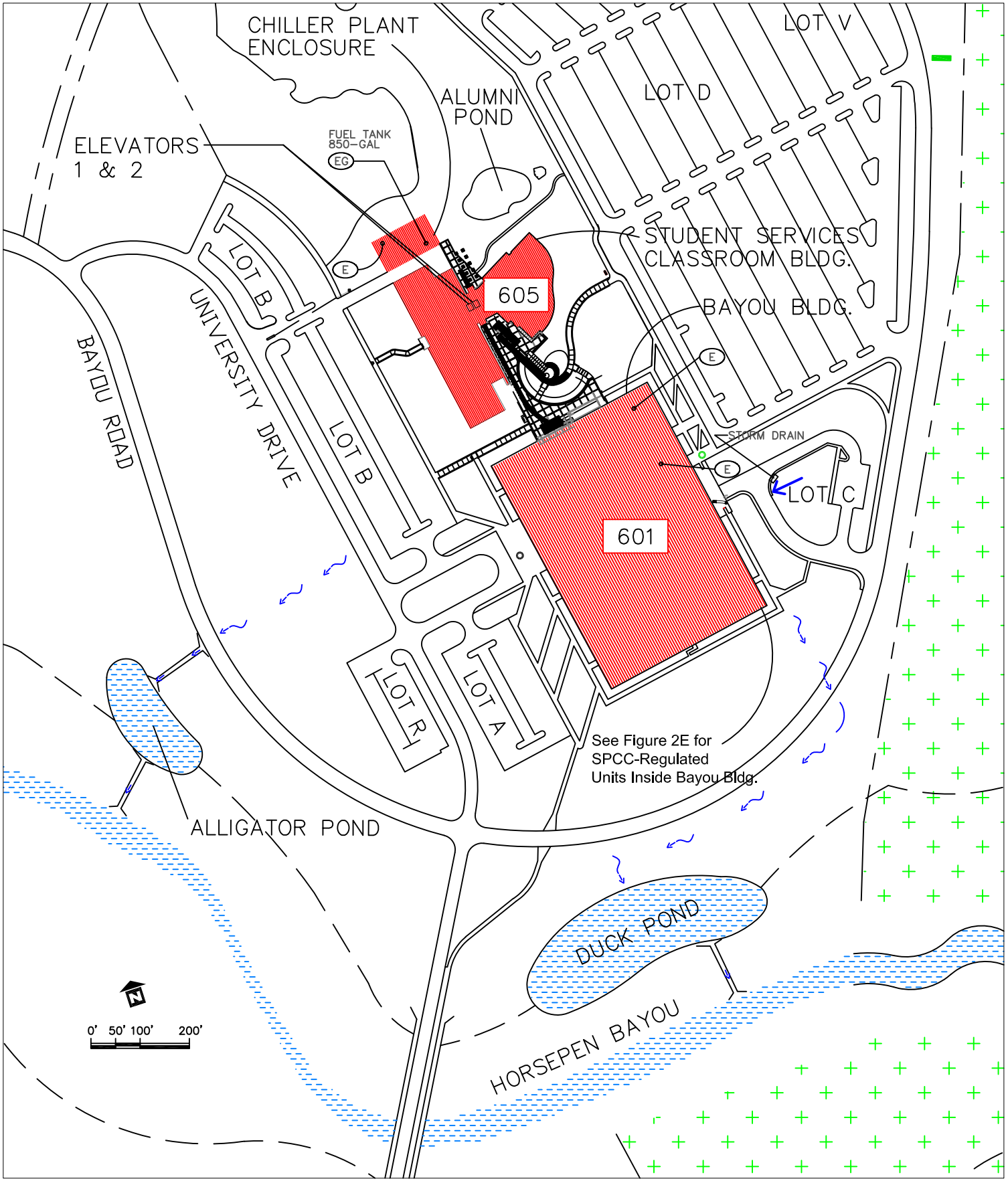
Designed by:	Project No.:	Revised by:	Checked by:	Revision Date:
RvC	013366	MGB	RDC	01/03/14



LEGEND

0600 ARBOR BUILDING
0601 BAYOU BUILDING
0602 FMC
0603 ARBOR ART STORAGE
0604 DELTA BUILDING
0620 GREEN HOUSE
0621 NORTH OFFICE ANNEX
0605 STUDENT SERVICE
EXISTING BUILDINGS

SPCC Plan Notes

- → Surface Flow Direction
- T-XX Transformer
- (E) Emergency Response Equipment
- (AST) Aboveground Storage Tank
- (EG) Emergency Generator
- (D) Drum Storage Area
- (HW) Hazardous Waste Storage Area

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FIGURE 2B – BAYOU & STUDENT SERVICES BUILDING

UNIVERSITY OF HOUSTON–CLEAR LAKE

Spill Prevention, Control and Countermeasure Plan

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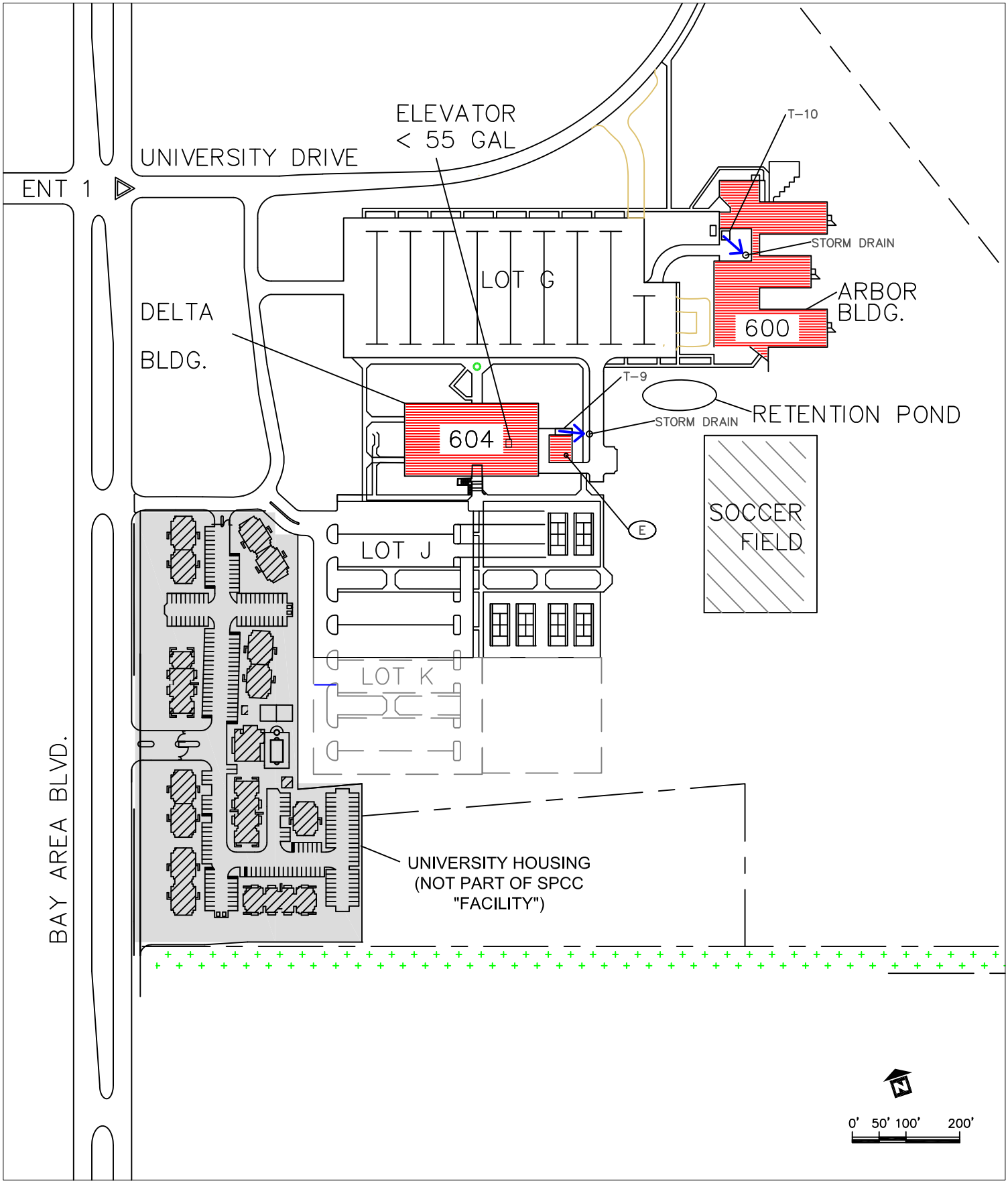
Designed by:	Project No.:	Revised by:	Checked by:	Revision Date:
RvC	013366	MGB	RDC	04/07/14



LEGEND

0600 ARBOR BUILDING
0601 BAYOU BUILDING
0602 FMC
0603 ARBOR ART STORAGE
0604 DELTA BUILDING
0620 GREEN HOUSE
0621 NORTH OFFICE ANNEX
0605 STUDENT SERVICE
EXISTING BUILDINGS

SPCC Plan Notes

→ Surface Flow Direction
T- XX Transformer
(E) Emergency Response Equipment
(AST) Aboveground Storage Tank
(EG) Emergency Generator
(D) Drum Storage Area
(HW) Hazardous Waste Storage Area

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FIGURE 2C – ARBOR & DELTA BUILDINGS

UNIVERSITY OF HOUSTON–CLEAR LAKE

Spill Prevention, Control and Countermeasure Plan

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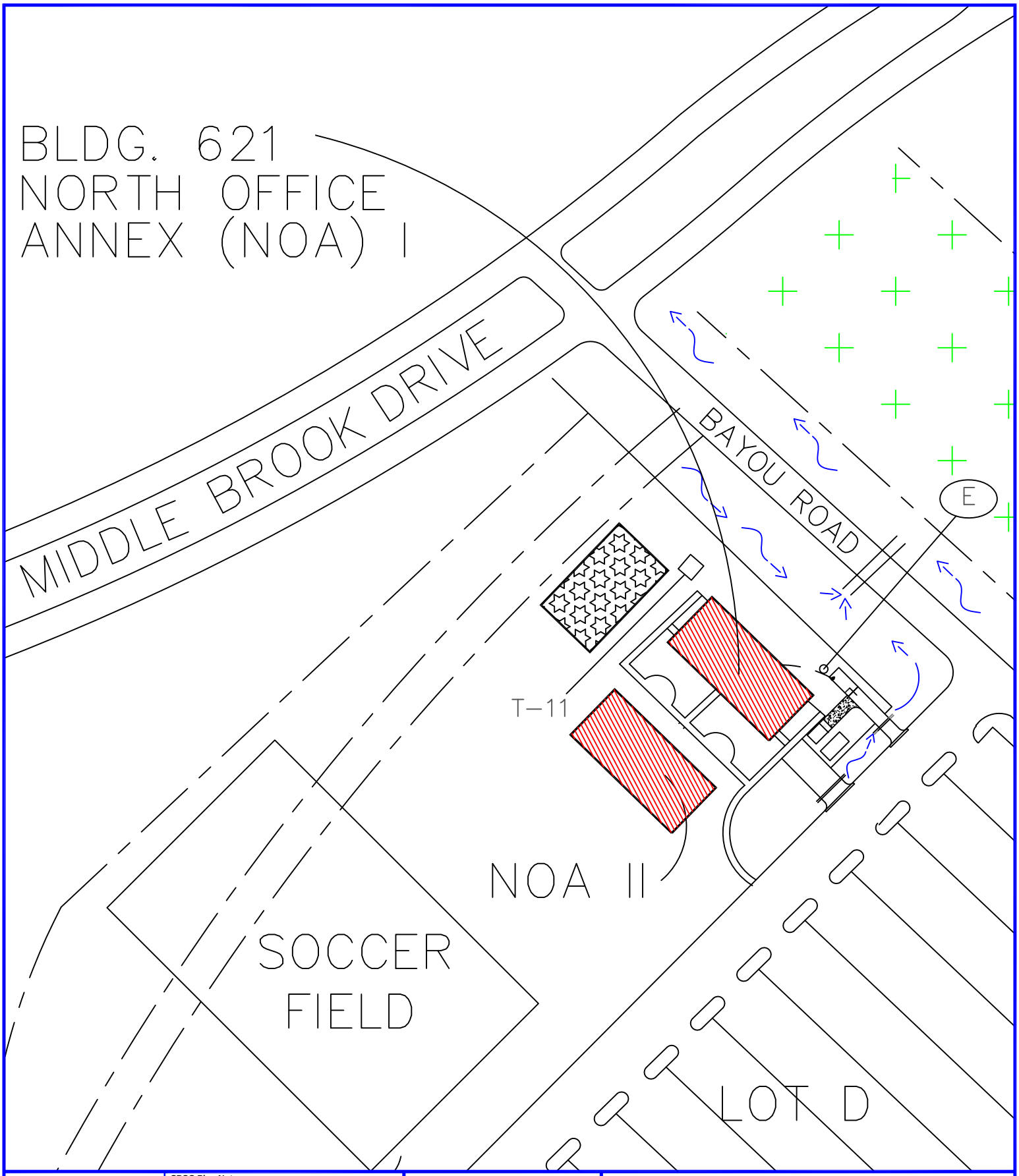
Designed by:	Project No.:	Revised by:	Checked by:	Revision Date:
RvC	013366	MGB	RDC	04/07/14



LEGEND

0600 ARBOR BUILDING
0601 BAYOU BUILDING
0602 FMC
0603 ARBOR ART STORAGE
0604 DELTA BUILDING
0620 GREEN HOUSE
0621 NORTH OFFICE ANNEX
0605 STUDENT SERVICE
EXISTING BUILDINGS

SPCC Plan Notes

→ Surface Flow Direction
T – XX Transformer
E Emergency Response Equipment
AST Aboveground Storage Tank
EG Emergency Generator
D Drum Storage Area
HW Hazardous Waste Storage Area

zephyr

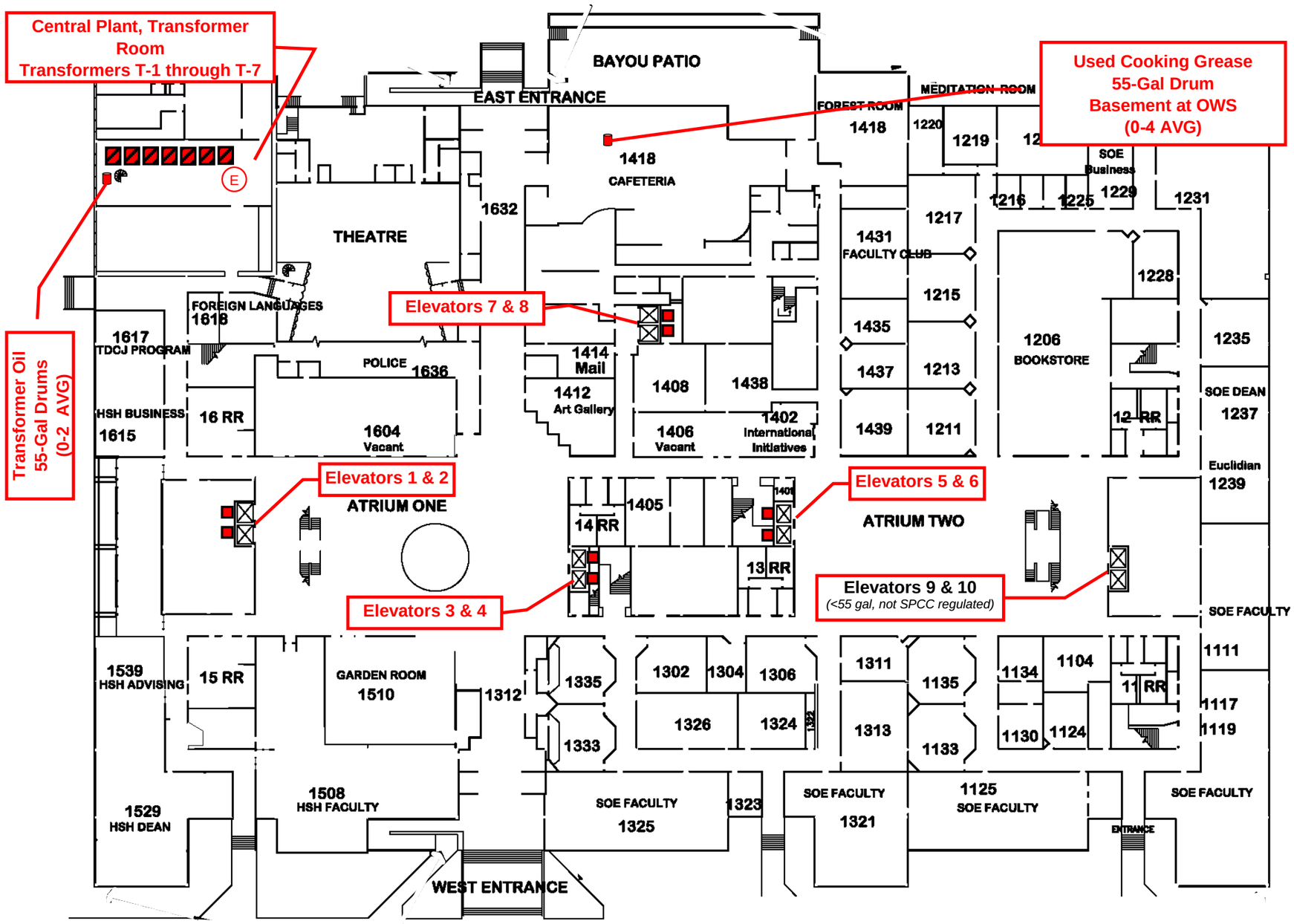
FIGURE 2D – NORTH OFFICE ANNEX BUILDING

UNIVERSITY OF HOUSTON–CLEAR LAKE

Spill Prevention, Control and Countermeasure Plan

Filename: H:\University of Houston - Clear Lake\13366 - UHCL 2013 SPCC Plan Finalization\2013 UHCL SPCC Plan

Designed by:	Project No.:	Revised by:	Checked by:	Revision Date:
RvC	013366	MGB	RDC	04/07/14



University of Houston Clear Lake
Facilities Management and Construction

BAYOU BUILDING
FIRST FLOOR

LEGEND

- Oil-Containing Elevator Equipment
- Oil-Containing Transformers
- Oil Drums
- (E) Emergency Response Equipment

Note: All elevator equipment rooms in Bayou Building are located on the ground-level floor.

N

Figure 2E

Oil Containers & Equipment Inside Bayou Building

Prepared By:	*Project No.*	*Date:*
RDC	*13366*	*12/27/2013*

zephyr

TABLES

TABLE 1
OIL STORAGE TANK and CONTAINER INVENTORY

Tank / Container	Oil Storage Capacity (gal)	Material Stored	Location Description	Container Description	Liquid Level Indicator 40 CFR 112.8(c)(8)	Secondary Containment (Description)	Exterior Drain Valve	Surface Drainage Route (Outside Secondary Containment)	Potential Types of Failure	Potential Release Volume (gal) / Rate of Release (gal/min) [1]	Comments
Facility Maintenance and Construction (FMC) Building (Bldg. 602)											
Diesel Generator AST	250	Diesel	Outside building; SE corner, under awning	Steel, double-walled generator base tank	Yes; site gauge	Yes; double-walled tank	N/A	Spills outside double-walled tank would pool on the paved driveway and parking area. Overflow would flow westward to the grass-covered power line right-of-way.	Rupture, leakage, overfill	250	The tank's double-walled construction is expected to retain any releases. In the event a release occurs outside the tank (e.g., during fueling or a catastrophic failure), sorbent material would be used to contain the released material as close to the source as possible until clean up occurs.
Backup Fuel Drum	55	Off-Road Diesel	Outdoors adjacent to emergency generator, under awning	D.O.T-Approved 55 gal drum	N/A	Commercially available containment pallet with containment capacity >55 gallons. Stored under awning to prevent collection of stormwater	N/A	Spills outside drum pallet would pool on the paved driveway and parking area. Overflow would flow westward to the grass-covered power line right-of-way.	Container rupture	55	Drum type subject to change; maximum amount of 1 55-gal drum has been assumed in total SPCC volume calculations.
Vehicle Fueling Gasoline/Diesel AST (split tank)	1,000	Diesel	Outside building; SE side	Double-compartment steel "box" tank	Yes; electronic gauge read in FMC office	Yes; double-walled; double-compartment tank	N/A	Spills outside the double-walled tank would flow to the east to adjacent grassy area.	Rupture, leakage, overfill	1,000	The tank's double-walled construction is expected to retain any releases. In the event a release occurs outside the tank (e.g., during fueling or a catastrophic failure), sorbent material would be used to contain the released material as close to the source as possible until clean up occurs.
	4,000	Gasoline							Rupture, leakage, overfill	4,000	
Used Oil AST	400	Used Oil	Outside building; SE side	Fiberglass, double-walled with covered fill basin	Yes; site gauge	Double-walled fiberglass tank	N/A	Spills outside the double-walled tank would flow to the east to adjacent grassy area.	Rupture, leakage, overfill	400	The tank's double-walled construction is expected to retain any releases. In the event a release occurs outside the tank (e.g., during fueling or a catastrophic failure), sorbent material would be used to contain the released material as close to the source as possible until clean up occurs.
Drum Storage Area	15-20 Drums @ 55 gal = 1,100 gal	Misc. Oils including - Gear, Lube, Motor Oil - Transmission Oil - Hydraulic Oil - Grease (see comments)	Inside building; NE side	D.O.T-Approved 55 gal drum	N/A	Some drums stored on commercially available containment pallets with containment capacity >55 gallons. For drums not located on containment pallets, building provides adequate containment.	No	For releases outside the containment provided, or if the containment pallet failed, oil would be contained in the building. Floor drains in drum storage area have been plugged.	Container rupture	55	Drum count subject to change; maximum amount of 20 55-gal drums has been assumed in total SPCC volume calculations. Exact material stored (hydraulic oil; motor oil; lubricants) is also subject to variation. All FMC building floor drains have been plugged.
Hazardous Waste Storage Facility	0 - 3 Drums @ 55 gal = 110 gal	Waste oily water or debris	Inside HW Building adj. to FMC	D.O.T-Approved 55 gal drum	N/A	Commercially available containment pallets with containment capacity >55 gallons	No	For releases outside the containment provided, or if the containment pallet failed, oil would be contained in the building. There are no floor drains in this building.	Container rupture	55	Drum count subject to change; maximum amount of 3 55-gal drums has been assumed in total SPCC volume calculations. Exact material stored is also subject to variation.
Bayou Building (Bldg. 601) - Central Plant											
Used Cooking Grease Drums	0 - 4 Drums @30 - 55 gal ea = 110 gal	Used cooking grease	Basement adjacent to Oil/Water Separator	Poly or steel drum capacity may vary from 30 - 55 gal	N/A	Commercially available containment pallet with containment capacity >55 gallons	N/A	Spills outside the containment would go directly to adjacent sump that goes to sanitary sewer system.	Container rupture	55	Drum type subject to change; maximum amount of 1 55-gal drum has been assumed in total SPCC volume calculations.
Transformer Fluid - Makeup Drums	0 - 2 Drums @ 55 gal = 110 gal	Transformer Oil	Within Central Plant transformer room	D.O.T-Approved 55 gal drum	N/A	Commercially available containment pallets with containment capacity >55 gallons	N/A	For releases outside the containment provided, or if the containment pallet failed, oil would be contained in the room.	Container rupture	55	Drum count subject to change; maximum amount of 2 55-gal drums has been assumed in total SPCC volume calculations. Spill would be retained in room until cleanup occurs.
Student Services Classroom Building (Bldg. 605)											
Emergency Diesel Generator (Serial # K030569525)	850	Diesel	Chiller Plant (behind façade); north side	Steel, double-walled tank; integral to generator	Yes; site gauge	Double-walled tank	N/A	Spills outside double-walled tank would flow to adjacent storm drain and thence to the Alumni Pond.	Rupture, leakage, overfill	850	The tank's double-walled construction is expected to retain any releases. In the event a release occurs outside the tank (e.g., during fueling or a catastrophic failure), sorbent material would be used to contain the released material as close to the source as possible until clean up occurs.

NOTES:

[1] Rate of Release/Potential Release Volume (gal) - For all tanks/containers, the rate of release assumes the entire volume of the tank/largest container (gal) is released in one minute (gal/min); therefore, these values are the same (only units differ).

TOTAL BULK OIL STORAGE CAPACITY =	**8,150**	**Gallons**
TOTAL MECHANICAL EQUIPMENT OIL STORAGE CAPACITY =	**3,140**	**Gallons**
TOTAL ELECTRICAL EQUIPMENT OIL STORAGE CAPACITY =	**2,150**	**Gallons**
AGGREGATE OIL STORAGE CAPACITY IN CONTAINERS ≥ 55 GALLONS =	**13,440**	**Gallons**

TABLE 2
OIL-FILLED MECHANICAL EQUIPMENT INVENTORY

Equipment No.	Description	Oil Capacity	Equipment Location (Room No.)	Surface Drainage Route / Diversionary Equipment [1, 2]	Most Likely Failure Scenario	Potential Release Volume / Rate of Release [3]	Containment/ Diversionary Structure
Bayou Building (BLDG 601) Elevator Banks - 1st Floor							
Elevators 1 and 2	Elevator hydraulic system	400 gal ea. elevator	15 MR	Building floor to sanitary drain or down elevator shaft	Leak	150 gal / 5 gal/day	Drain block and sorbent materials[1]
Elevators 3 and 4	Elevator hydraulic system	400 gal ea. elevator	14 EL	Building floor or down elevator shaft	Leak	150 gal / 5 gal/day	Drip pan below pump and tank, sorbent materials[2]
Elevators 5 and 6	Elevator hydraulic system	400 gal ea. elevator	14 EL	Building floor or down elevator shaft	Leak	150 gal / 5 gal/day	Sorbent materials[2]
Elevator 7 and 8	Elevator hydraulic system	130 gal ea. elevator	24 MR	Building floor to sanitary drain or down elevator shaft	Leak	150 gal / 5 gal/day	Drip pan below pump and tank, sorbent materials[2]
Student Services Classroom Building (Bldg. 605) - 1st Floor							
Elevators 1 and 2	Elevator hydraulic system	240 gal ea. elevator	0.100 MR	Building floor to sanitary drain or down elevator shaft	Leak	150 gal / 5 gal/day	Drain block and sorbent materials[1]

[1] Releases in rooms where there are area sanitary drains would go to the floor of the building and flow toward the sanitary (condensate) drain; sorbents will be used to block the drain and contain the oil in the area of the release until cleanup is complete. Releases to elevator shaft would stay in the shaft, or soak into the ground where they will be retained with sorbent materials and removed as promptly as possible.

[2] Releases in rooms where there are no drains would go to the floor of the building; sorbents will be used to contain the oil in the area of the release until cleanup is complete. Releases to elevator shaft would stay in the shaft, or soak into the ground where they will be retained with sorbent materials and removed as promptly as possible.

[3] Rate of Release/Potential Release Volume (gal) - For oil-filled mechanical equipment, the rate of release assumes that a leak of 5 gal/day might occur at a fitting, and not be discovered until the next SPCC inspection (1 month).

TOTAL MECHANICAL EQUIPMENT OIL STORAGE CAPACITY = 3,140 Gallons

TABLE 3
OIL-FILLED ELECTRICAL EQUIPMENT INVENTORY

Transformer # / Serial No.	Oil Type	Oil Storage Capacity (gal)	Location Description	Surface Drainage Route / Diversionary Equipment [1]	Most Likely Failure Scenario	Potential Release Volume (gal) / Rate (gal/min)[2]
Bayou Building (Bldg. 601) - Central Plant						
T-1 / H-882733A	Transformer Oil	245	Indoors in Central Plant in common curbed containment area	To curbed area on concrete floor of curbed interior room. Spills would be retained in room.	Rupture	245
T-2/ H-882734A	Transformer Oil	140			Rupture	140
T-3 / L245425	Transformer Oil	222			Rupture	222
T-4/ H-882734B	Transformer Oil	140			Rupture	140
T-5/ L249565	Transformer Oil	325			Rupture	325
T-6 / H-882734C	Transformer Oil	140			Rupture	140
T-7 / H-882732B	Transformer Oil	216			Rupture	216
Delta Building (Bldg. 604)						
T-9 / 150156	Transformer Oil	308	Outside building	To pavement, then to grassy area, then to nearby storm drain.	Rupture	308
Arbor Building (Building 600)						
T-10 / M317818TFPA	Transformer Oil	240	Outside Building; in restricted (fenced) area.	To pavement, then to nearby storm drain.	Rupture	240
North Office Annex I (NOA I Bldg.)						
T-11 / F0112L2	Transformer Oil	174	On concrete pad in grassy area	From concrete pad to grassy area, then northeast to drainage ditch along Bayou Drive.	Rupture	174

NOTES:
[1] Response equipment located nearby to retain a release as close to the source as possible.
[2] For all equipment, the rate of release assumes the entire volume of the tank/largest container (gal) is released in one minute (gal/min); therefore, these values are the same (units differ).

TOTAL ELECTRICAL EQUIPMENT OIL STORAGE CAPACITY = 2,150 Gallons

APPENDIX A

RECORD OF DISCHARGE FORM

APPENDIX A

RECORD OF DISCHARGE FROM SECONDARY CONTAINMENT Per 40 CFR 112.8 (c)(3)(ii - iv)

Oil Storage Secondary Containment:: _____

Instructions:

- The valve or pump used to remove storm water from the containment area must be manually operated and be supervised during operation.
- If there is oil or other liquid present it may not be discharged but must be disposed off site as described in the SPCC Plan.

Visual Indication of Oil or Other Liquid (Yes / No)	Disposition *	Date Removed from Containment	Time Pump Started / Valve Opened	Time Pump is Removed / Valve Closed

* Name of transporter and/or disposal facility.

Comments: _____

_____

_____

_____

_____

Inspector Name (Print):	Inspector Signature:
Supervisor Review:	
NOTE: RETAIN COMPLETED INSPECTION FORM IN SPCC PLAN. ANY SPILLS OR UNACCEPTABLE CONDITIONS MUST BE IMMEDIATELY REPORTED TO THE RISK MANAGEMENT DEPARTMENT.	

APPENDIX B

SECONDARY CONTAINMENT CALCULATIONS

APPENDIX B
UNIVERSITY OF HOUSTON - CLEAR LAKE
SPCC PLAN CONTAINMENT CALCULATIONS

Oil Container Information			Containment Capacity Calculation									
				Containment Dimensions								
Oil Container	Contents	Capacity (gal)	Containment; Tank(s) Type	Length (ft)	Width (ft)	Height (ft)	Containment Gross Capacity (gal, unless otherwise noted)	Capacity Displaced by Other Structures in Containment	Available Containment (gal, unless otherwise noted)	Exposed to Rainfall? (yes/no)	Rainfall Volume [1] (gal)	Required Containment [2] (gal)
Facility Management and Construction (FMC) Building (Bldg. 602)												
Diesel Generator AST	Diesel	250	Steel, double-walled generator base tank	---	---	---	> 250	None	> 250	No	0	250
Backup Fuel Drum	Off-Road Diesel	55 gal	Oil drums stored on commercially available containment pallets with containment capacity >55 gallons.	Commercially Available Containment Pallets			~ 66	NA	~ 66 gal/drum	No	0	55
Vehicle Fueling Gasoline/Diesel AST (split tank)	Diesel	1,000	Yes; double-walled; double-compartment tank	---	---	---	> 1,000	None	> 1,000	No	0	1,000
	Gasoline	4,000		---	---	---	> 4,000	None	> 4,000	No	0	4,000
Used Oil AST	Used Oil	400	Fiberglass double-walled tank	---	---	---	> 400	None	> 400	No	0	400
Drums - Drum Storage Area	Misc. Oils including - Gear, Lube, Motor Oil - Transmission Oil - Hydraulic Oil - Grease (see comments)	55 gal	Some drums stored on commercially available containment pallets with containment capacity >55 gallons. For drums not located on containment pallets, building provides adequate containment.	Commercially Available Containment Pallets			~ 66	None	~ 66 gal/drum	No	0	55
Drums - Hazardous Waste Storage Facility	Waste oily water	55 gal	Oil drums stored on commercially available containment pallets with containment capacity >55 gallons.	Commercially Available Containment Pallets			~ 66	None	~ 66 gal/drum	No	0	55
Bayou Building (Bldg. 601) - Central Plant												
Used Cooking Grease Drum	Used cooking grease	30 - 55	Commercially available containment pallet with containment capacity >55 gallons	Commercially Available Containment Pallets			~ 66	NA	~ 66 gal/drum	No	0	55
Transformer Fluid - Makeup Drums	Transformer Oil	0 - 2 Drums @ 55 gal = 110 gal	Commercially available containment pallets with containment capacity >55 gallons	Commercially Available Containment Pallets			~ 66	NA	~ 66 gal/drum	No	0	55
Student Services Classroom Building (Bldg. 605)												
Emergency Diesel Generator	Diesel	850	Steel, double-walled generator base tank	---	---	---	> 850	None	> 850	No	0	850

Note 1: 25-year 24-hour rainfall per SCS, 1986 (http://www.lmNoeng.com/RainfallMaps/RainfallMaps.htm#25yr,%2024-hr) = 9.96 in (0.83 ft)

Note 2: Required containment equals the volume of the largest tank in the containment plus the calculated rainfall volume based on containment L X W (for containment with multiple areas, calculate rainfall in each area and add to largest tank volume).

APPENDIX C

CAMPUS QUARTERLY SPCC INSPECTION CHECKLIST FORMS AND RECORDS

This inspection record (or another form which includes the same inspection items) must be completed quarterly.

APPENDIX C
CAMPUS QUARTERLY INSPECTION CHECKLIST

Inspection Date:
(Month / Year)

Type of Unit to Be Inspected:

Unit No. Name:

**** Any item that receives a yes ("Y") as an answer must be described and addressed on the Corrective Action sheet immediately.***

		Bayou Building										
		Container Storage	**Emergency Response Equipment**	**Container Storage**	**Electric Transformer**	**Electric Transformer**	**Electric Transformer**	**Electric Transformer**	**Electric Transformer**	**Electric Transformer**	**Electric Transformer**	**Emergency Response Equipment**
		Food Services Cooking Grease Drum	**Basement Grease Trap Area**	**Transformer Oil Drum Storage Area**	**Transformer T-1**	**Transformer T-2**	**Transformer T-3**	**Transformer T-4**	**Transformer T-5**	**Transformer T-6**	**Transformer T-7**	**Central Plant Transformer Area**
A	**Tanks**											
A.1	Is tank damaged or deteriorating?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.2	Are tank supports damaged or buckled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.3	Are level gauges and/or alarms inoperative?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.4	Is the secondary containment damaged or otherwise not intact?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.5	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.6	Is the secondary containment drain valve inoperable, open, or not locked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B	**Piping**											
B.1	Are valves, gaskets, joints or other appurtenance leaking?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.2	Are pipelines and its supports damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.3	Are pumps and valves unlocked when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.4	Is the associated pump(s) in poor condition?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.5	If a pump is on, is there no operator present?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C	**Loading / Unloading and Transfer Equipment**											
C.1	Are loading / unloading connections damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.2	Are loading connections uncapped capped or open when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.3	Does the loading/unloading area contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.4	Is staining evident at loading area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D	**Dispensing Equipment**											
D.1	Are dispenser or hoses inappropriately stored?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D.2	Is staining evident at dispenser area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E	**Portable Containers (Drums, Totes)**											
E.1	Is the coatings on drums and/or totes chipped, peeling, bubbling, corroded, or other wise damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.2	Are containers not properly labeled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.3	Are containers open or unsealed?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.4	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.5	Area any containers located outside a containment area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F	**Oil-Filled Equipment**											
F.1	Is equipment in poor condition or damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.2	Is electric transformer cabinet not secured or unlocked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.3	Is staining evident on equipment pad?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.4	Does the area around the equipment pad contain oil, water, debris, or unauthorized containerized materials.	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G	**Emergency Response Equipment**											
G.1	Are dated materials beyond their recommended "use-by" date?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.2	Are the equipment and materials present inadequate to clean up potential spills in that area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.3	Is the equipment not readily available for immediate deployment?											
G.4	Is the equipment in poor condition or not ready for use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H	**Security**											
H.1	Is the fencing or enclosure damage or compromised?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.2	Are any gates/doors open and unattended ?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.3	Is security lighting broken or not working?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N

Inspection Date:

Inspected By (Print):

Inspected By (Signature):

This inspection record (or another form which includes the same inspection items) must be completed quarterly.

APPENDIX C
CAMPUS QUARTERLY INSPECTION CHECKLIST

Inspection Date: *(Month / Year)*

Type of Unit to Be Inspected:

Unit No. Name:

Any item that receives a yes ("Y") as an answer must be described and addressed on the Corrective Action sheet immediately.

		Bayou Building (continued)					
		Elevator Equipment	Elevator Equipment	Elevator Equipment	Elevator Equipment	Emergency Response Equipment	Building Security
		Elevators 1 & 2 Hydraulic Tanks	Elevators 3 & 4 Hydraulic Tanks	Elevators 5 & 6 Hydraulic Tanks	Elevators 7 & 8 Hydraulic Tanks	Elevator Tank Areas	
A	**Tanks**						
A.1	Is tank damaged or deteriorating?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.2	Are tank supports damaged or buckled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.3	Are level gauges and/or alarms inoperative?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.4	Is the secondary containment damaged or otherwise not intact?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.5	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.6	Is the secondary containment drain valve inoperable, open, or not locked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B	**Piping**						
B.1	Are valves, gaskets, joints or other appurtenance leaking?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.2	Are pipelines and its supports damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.3	Are pumps and valves unlocked when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.4	Is the associated pump(s) in poor condition?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.5	If a pump is on, is there no operator present?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C	**Loading / Unloading and Transfer Equipment**						
C.1	Are loading / unloading connections damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.2	Are loading connections uncapped capped or open when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.3	Does the loading/unloading area contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.4	Is staining evident at loading area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D	**Dispensing Equipment**						
D.1	Are dispenser or hoses inappropriately stored?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D.2	Is staining evident at dispenser area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E	**Portable Containers (Drums, Totes)**						
E.1	Is the coatings on drums and/or totes chipped, peeling, bubbling, corroded, or other wise damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.2	Are containers not properly labeled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.3	Are containers open or unsealed?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.4	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.5	Area any containers located outside a containment area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F	**Oil-Filled Equipment**						
F.1	Is equipment in poor condition or damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.2	Is electric transformer cabinet not secured or unlocked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.3	Is staining evident on equipment pad?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.4	Does the area around the equipment pad contain oil, water, debris, or unauthorized containerized materials.	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G	**Emergency Response Equipment**						
G.1	Are dated materials beyond their recommended "use-by" date?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.2	Are the equipment and materials present inadequate to clean up potential spills in that area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.3	Is the equipment not readily available for immediate deployment?						
G.4	Is the equipment in poor condition or not ready for use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H	**Security**						
H.1	Is the fencing or enclosure damage or compromised?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.2	Are any gates/doors open and unattended ?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.3	Is security lighting broken or not working?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N

Inspection Date:

Inspected By (Print):

Inspected By (Signature):

This inspection record (or another form which includes the same inspection items) must be completed quarterly.

APPENDIX C
CAMPUS QUARTERLY INSPECTION CHECKLIST

		Student Services Building					Arbor & Delta Buildings			
	Inspection Date: *(Month / Year)*									
	Type of Unit to Be Inspected:	**Bulk Tank**	**Emergency Response Equipment**	**Elevator Equipment**	**Emergency Response Equipment**	**Building Security**	**Electric Transformer**	**Electric Transformer**	**Emergency Response Equipment**	**Building Security**
	Unit No. Name:	**Emergency Generator Tank**	**Chiller Plant Enclosure**	**Elevators 1 & 2 Hydraulic Tanks**	**Elevator Tank Areas**		**Delta Bldg. Transformer T-9**	**Arbor Bldg. Transformer T-10**	**Delta Mechancial Bldg**	

**** Any item that receives a yes ("Y") as an answer must be described and addressed on the Corrective Action sheet immediately.***

A	**Tanks**									
A.1	Is tank damaged or deteriorating?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.2	Are tank supports damaged or buckled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.3	Are level gauges and/or alarms inoperative?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.4	Is the secondary containment damaged or otherwise not intact?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.5	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.6	Is the secondary containment drain valve inoperable, open, or not locked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B	**Piping**									
B.1	Are valves, gaskets, joints or other appurtenance leaking?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.2	Are pipelines and its supports damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.3	Are pumps and valves unlocked when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.4	Is the associated pump(s) in poor condition?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.5	If a pump is on, is there no operator present?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C	**Loading / Unloading and Transfer Equipment**									
C.1	Are loading / unloading connections damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.2	Are loading connections uncapped capped or open when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.3	Does the loading/unloading area contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.4	Is staining evident at loading area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D	**Dispensing Equipment**									
D.1	Are dispenser or hoses inappropriately stored?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D.2	Is staining evident at dispenser area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E	**Portable Containers (Drums, Totes)**									
E.1	Is the coatings on drums and/or totes chipped, peeling, bubbling, corroded, or other wise damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.2	Are containers not properly labeled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.3	Are containers open or unsealed?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.4	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.5	Area any containers located outside a containment area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F	**Oil-Filled Equipment**									
F.1	Is equipment in poor condition or damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.2	Is electric transformer cabinet not secured or unlocked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.3	Is staining evident on equipment pad?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.4	Does the area around the equipment pad contain oil, water, debris, or unauthorized containerized materials.	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G	**Emergency Response Equipment**									
G.1	Are dated materials beyond their recommended "use-by" date?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.2	Are the equipment and materials present inadequate to clean up potential spills in that area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.3	Is the equipment not readily available for immediate deployment?									
G.4	Is the equipment in poor condition or not ready for use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H	**Security**									
H.1	Is the fencing or enclosure damage or compromised?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.2	Are any gates/doors open and unattended ?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.3	Is security lighting broken or not working?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N

Inspection Date:

Inspected By (Print):

Inspected By (Signature):

This inspection record (or another form which includes the same inspection items) must be completed quarterly.

APPENDIX C
CAMPUS QUARTERLY INSPECTION CHECKLIST

		Facility Management and Construction										NOA I Building		
	Inspection Date: *(Month / Year)*													
	Type of Unit to Be Inspected:	Bulk Tank	Container Storage	Bulk Tank	Bulk Tank	Emergency Response Equipment	Container Storage	Emergency Response Equipment	Container Storage	Emergency Response Equipment	Building Security	Electric Transformer	Emergency Response Equipment	Building Security
	Unit No. Name:	Emergency Generator Tank	Backup Fuel Drum	Vehicle Fueling Tank	Used Oil Tank	Generator & Fueling Area	Drum Storage Area	Drum Storage Area	Hazardous Waste Storage Facility	Hazardous Waste Storage Bldg.		Transformer T-11	RM Dept Storage Shed	
	**** Any item that receives a yes ("Y") as an answer must be described and addressed on the Corrective Action sheet immediately.***													
A	**Tanks**													
A.1	Is tank damaged or deteriorating?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.2	Are tank supports damaged or buckled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.3	Are level gauges and/or alarms inoperative?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.4	Is the secondary containment damaged or otherwise not intact?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.5	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
A.6	Is the secondary containment drain valve inoperable, open, or not locked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B	**Piping**													
B.1	Are valves, gaskets, joints or other appurtenance leaking?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.2	Are pipelines and its supports damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.3	Are pumps and valves unlocked when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.4	Is the associated pump(s) in poor condition?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
B.5	If a pump is on, is there no operator present?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C	**Loading / Unloading and Transfer Equipment**													
C.1	Are loading / unloading connections damaged or deteriorated?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.2	Are loading connections uncapped capped or open when not in use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.3	Does the loading/unloading area contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
C.4	Is staining evident at loading area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D	**Dispensing Equipment**													
D.1	Are dispenser or hoses inappropriately stored?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
D.2	Is staining evident at dispenser area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E	**Portable Containers (Drums, Totes)**													
E.1	Is the coatings on drums and/or totes chipped, peeling, bubbling, corroded, or other wise damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.2	Are containers not properly labeled?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.3	Are containers open or unsealed?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.4	Does the secondary containment contain oil, water, debris or unauthorized materials? (If yes, note whether or not a sheen is present)	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
E.5	Area any containers located outside a containment area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F	**Oil-Filled Equipment**													
F.1	Is equipment in poor condition or damaged?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.2	Is electric transformer cabinet not secured or unlocked?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.3	Is staining evident on equipment pad?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
F.4	Does the area around the equipment pad contain oil, water, debris, or unauthorized containerized materials.	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G	**Emergency Response Equipment**													
G.1	Are dated materials beyond their recommended "use-by" date?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.2	Are the equipment and materials present inadequate to clean up potential spills in that area?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
G.3	Is the equipment not readily available for immediate deployment?													
G.4	Is the equipment in poor condition or not ready for use?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H	**Security**													
H.1	Is the fencing or enclosure damage or compromised?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.2	Are any gates/doors open and unattended ?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N
H.3	Is security lighting broken or not working?	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N	☐Y ☐N

Inspection Date:

Inspected By (Print):

Inspected By (Signature):

APPENDIX C
CAMPUS MONTHLY INSPECTION CORRECTIVE ACTION RECORD

This inspection record (or another form which includes the same record items) must be completed when an inspection indicates a finding.

Oil Storage Unit	Audit Question	Inspection Finding	Recommended Action	Work Order No.	Assigned To:	Requested Completion Date
Elev Tank 4	A.5	Oil spill on building floor EXAMPLE	Clean up using absorbents, arrange for disposal per Dell EHS procedures.	WO456	Joe T.	10/1/2013

APPENDIX D

CERTIFICATION OF THE APPLICABILITY OF THE "SUBSTANTIAL HARM" CRITERIA CHECKLIST

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: University of Houston - Clear Lake
FACILITY ADDRESS: 2700 Bay Area Blvd, Houston, Texas 77058

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

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

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 formula in Attachment C-III, Appendix C, 40 CFR 112 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 Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan. ☐ Yes ☒ No

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 (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]? ☐ Yes ☒ No

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

[2] For the purposes of 40 112, public drinking water intakes are analogous to public water systems as described in 40 CFR 143.2(c).

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 spill in an amount greater than or equal to 10,000 gallons within the last 5 years? ☐ Yes ☒ No

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.

Signature _____

Name (print or type) _____

Title _____

Date _____