U.S. Environmental Protection Agency
Spill Prevention Control & Countermeasure Plan

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Course Outline

1. Learning objectives
2. Introduction
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This course includes a multiple-choice quiz at the end.

Learning Objective

At the conclusion of this course, the student will:

- Be familiar with 40 CFR Part 112-Oil Pollution Prevention regulations, and
- Have a better understanding of the requirements and other regulatory provisions for preparing Spill Prevention Control and Countermeasure (SPCC) plans for the storage of petroleum regulated substances.
- Be able to properly calculate the correct volume requirement for secondary containment structures.
- Understand tank integrity testing requirements.
- Know how to write a SPCC CONTINGENCY PLAN.
- Be able to list requirements for the CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM
- Know what the term “sufficiently impervious” applies to.
- Know the EPA’s Definition of the word “Oil”
- Understand engineer’s requirements for development of SPCC Plan.

Course Introduction

The Oil Pollution Prevention regulation, also known as the SPCC regulation, was promulgated on December 11, 1973, under the authority of §311(j) (1) (C) of the Clean Water Act (CWA). The regulation established procedures, methods, and equipment requirements for non-transportation-related facilities (see table below) with aboveground oil storage capacity greater than 1,320 gallons in a single tank or 1,320 gallons total aggregate capacity. The regulation also applies to underground aggregate storage capacity greater than 42,000 gallons not in compliance with Federal or State underground storage tank regulations.

The US EPA proposed revisions to the SPCC rule in 1991, 1993, 1997 2002, 2006, 2008, 2009 and 2010. These revisions became effective on **November 10, 2011 for most on shore oil storage facilities. Farms became effective on May 13, 2013.**

The regulation requires that all regulated facilities have a Registered PE develop a Spill Plan before the new facility begins operations or within six months of the effective date for existing facilities.

For a copy of 40CFR Part 112, please refer to the US EPA’s Oil Spill Web Site at: http://www.epa.gov/emergencies/content/spcc/index.htm. The American Petroleum Institute (API) Recommended Practice Bulletin D16 can also be helpful (See: https://www.api.org/)

The US EPA Federal Regulation 40 CFR part 112 requires that a SPCC Plan be prepared for all onshore and offshore oil storage facilities that have discharged (spilled/leaked) oil or could reasonably be expected to discharge oil that would likely reach **“navigable water”** or adjoining shorelines. The requirement for the SPCC Plan applies to non-vehicle or non-pipeline facilities involving storage facilities where any single above ground tank is larger than 1,320 gallons or the aggregate total above

ground storage is over 1,320 gallons. Amendments to the SPCC plan are required to be reviewed by a Registered PE when the facility adds or removes tanks, begins storing different oil products, other changes at the facility result in an increase in spill potential and when amendments are required by US EPA.

Course Content

The US EPA Federal Regulation 40 CFR part 112 requires that a Spill Prevention Control and Countermeasure Plan (SPCC) be prepared for all onshore and offshore oil storage facilities that have discharged (spilled) oil or could reasonably be expected to discharge oil that would likely reach "navigable water", i.e. Causes a sheen or discoloration on the surface of the water or adjoining shorelines; Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or Violates an applicable water quality standard.

The requirement for the SPCC Plan applies to non-vehicle or non-pipeline facilities involving storage facilities where any single above ground tank is larger than 1,320 gallons or the aggregate total above ground storage is over 1,320 gallons. According to the EPA, there are virtually no exemptions or exceptions from the applicability requirement.

Amendments to the SPCC plan are required to be reviewed by a registered Professional Engineer (PE) when the facility adds or removes tanks, changing to different oil products, changes in spill potential and when amendments are required by Federal EPA.

Rule Organization

Part 112 is divided into four subparts, according to the oil and facility type. Subparts A, B, and C address oil discharge prevention requirements and are commonly referred to as the "SPCC rule." Subpart D, commonly referred to as the "FRP rule," addresses facility response planning requirements in the event of an oil discharge, and includes the FRP requirements and facility response training and drill requirements. The part is organized as follows:

Subpart A: Applicability, definitions, and general requirements for all facilities and all types of oil
Subpart B: Requirements for petroleum oils and non-petroleum oils, except those covered in Subpart C
Subpart C: Requirements for animal fats and oils and greases, and fish and marine mammal oils; and for vegetable oils, including oils from seeds, nuts, fruits, and kernels
Subpart D: Response requirements

Pertaining to all oil and facility types, Subpart A contains key sections of the SPCC rule, including:

§112.1 General Applicability
§112.2 Definitions
§112.3 Requirement to Prepare and Implement an SPCC Plan
§112.4 Amendment of an SPCC Plan by Regional Administrator
§112.5 Amendment of an SPCC Plan by Owners or Operators
§112.7 General Requirements for SPCC Plans
§§112.8 and 112.12 Onshore Facilities (excluding production facilities)
§112.9 Oil Production Facilities (onshore)
§112.10 Oil Drilling and Workover Facilities (onshore)
§112.11 Oil Drilling, Production, or Workover Facilities (offshore)

The Oil Pollution Prevention regulation also contains several appendices, including Memoranda of Understanding and appendices referenced in the FRP rule (Substantial Harm Criteria, Determination of a Worst Case Discharge Planning Volume, Determination and Evaluation of Required Response Resources for Facility Response Plans, and a model Facility-Specific Response Plan).

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Examples of oil-related activities that may be regulated under 40 CFR part 112:

§112.1(b)...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 or oil products...**.

The extent of a "facility" under SPCC depends on site-specific circumstances. Factors that may be considered relevant in delineating the boundaries of a facility for SPCC purposes may include, but are not limited to:

1. Ownership, management, and operation of the buildings, structures, equipment, installations, pipes, or pipelines on the site;
2. Similarity in functions, operational characteristics, and types of activities occurring at the site;
3. Adjacency; or Shared drainage pathways (e.g., same receiving waterbodies).

The facility owner or operator, or a Professional Engineer (PE) on behalf of the facility owner/operator, determines what constitutes the "facility."

Examples of transportation-related and non-transportation-related facilities from the 1971 DOT-EPA Memorandum of Understanding.

Transportation-related Facilities (DOT Jurisdiction)	**Non-Transportation-related Facilities** (EPA Jurisdiction)
Onshore and offshore terminal facilities, including transfer hoses, loading arms, and other equipment used to transfer oil in bulk to or from a vessel, including storage tanks and appurtenances for the reception of oily ballast water or tank washings from vessels Transfer hoses, loading arms, and other equipment appurtenant to a non-transportation-related facility used to transfer oil in bulk *to or from a vessel* Interstate and intrastate onshore and offshore pipeline systems. Highway vehicles and railroad cars used to transport oil	Fixed or mobile onshore and offshore oil drilling and production facilities. Oil refining and storage facilities. Industrial, commercial, agricultural, and public facilities that use and store oil. Waste treatment facilities. Loading racks, transfer hoses, loading arms, and other equipment used to transfer oil in bulk *to or from highway vehicles or railroad cars.* Highway vehicles and railroad cars and pipelines that is used for the transport of oil within confines of non transportation-related facility.

Tank Trucks: EPA regulates tank trucks as "mobile/portable containers" under the SPCC rule if they operate exclusively within the confines of a non-transportation-related facility.

Railroad Cars: EPA regulates railroad cars after the transportation process ends; that is, when the railroad cars are serving as non-transportation-related storage at an SPCC-regulated facility. EPA jurisdiction includes railroad cars that are at their final destination, and/or if loading or unloading has begun.

US EPA INSPECTOR GUIDANCE DOCUMENT

On August 28, 2013, EPA released the revised *SPCC Guidance for Regional Inspectors*. The guidance document is intended to assist regional inspectors in reviewing a facility's implementation of the Spill Prevention, Control, and Countermeasure (SPCC) rule at 40 CFR part 112 and understanding the rule's applicability, and to help clarify the role of the inspector in the review and evaluation of the performance-based SPCC requirements. The guidance document is also available to owners and operators of facilities that may be subject to the requirements of the SPCC rule and the general public on how EPA intends the SPCC rule to be implemented. The document is designed to provide a consistent national policy on several SPCC-related issues.

US EPA Policy & Regulatory guidance documents can be downloaded here: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors .

US EPA guidance addresses issues such as inspection frequency, scope (e.g., internal and /or external), training and/or qualifications of persons conducting the inspections, environmental equivalence, secondary containment and impracticability determinations, oil water separators, site diagrams and other measures that may be appropriate at a given site (e.g., measures to detect the presence of water in a container). US EPA has used industry standards in developing such guidance.

Some information in this course (tables, policy statements) is taken directly from the Guidance Documents.

New SPCC Regulations Effective 8-16-02 & Changes made up until 2011.

Summarizes rule amendments (beginning in 2002) to the SPCC regulation that was first promulgated in December 1973 and effective January 10, 1974. For specific details on amendments, please refer to preamble text and relevant sections of this guidance.

- 2002 refers to the amendments published at 67 FR 47042, July 17, 2002
- 2006 refers to the amendments published at 71 FR 77266, December 26, 2006
- 2008 refers to the amendments published at 73 FR 74236, December 5, 2008
- 2009 refers to the amendments published at 74 FR 58784, November 13, 2009
- 2011 EPA exempted milk and milk product containers-published at 76 FR 21652, April 18, 2011

What changes did EPA finalize in the amendments?

The revised rule exempts:

- ***Hot-mix asphalt and hot-mix asphalt containers;***
- ***Residential heating oil containers (i.e., those used solely at single-family residences);***
- ***Pesticide application equipment and related mix containers;***
- ***Underground oil storage tanks that supply emergency diesel generators at nuclear power generation facilities licensed by the Nuclear Regulatory Commission;***
- ***Intra-facility gathering lines subject to U.S. Department of Transportation's pipeline regulations; and***
- ***Produced water containers that do not contain oil in harmful quantities.***

Streamlining and Additional Flexibility for All Regulated Facilities

- ***Provides a Plan template for certain qualified facilities to complete and self-certify; (Tier I & Tier II)***
- ***Extends "qualified facility" status to certain smaller oil production facilities;***
- ***Amends the definition of "facility" to clarify the flexibility associated with describing a facility's boundaries;***
- ***Amends the facility diagram requirement to clarify how containers (fixed and mobile) and complex piping/transfer areas are identified on the facility diagram;***
- ***Defines "loading/unloading rack" to clarify the equipment subject to the provisions for facility tank car and tank truck loading/unloading racks;***
- ***Amends the general secondary containment requirement;***
- ***Exempts non-transportation-related tank trucks from sized secondary containment requirements;***
- ***Amends the facility security requirements to allow the facility owner/operator to tailor security measures to the facility's specific characteristics and location; and***
- ***Amends integrity testing requirements for bulk storage containers to allow greater flexibility in the use of industry standards at all facilities.***

Facilities that are excluded from the SPCC rule because they are not subject to EPA's jurisdiction, §112.1(d) exempts:

- Any facility where the storage capacity of completely buried storage tanks and associated piping and equipment does not exceed 42,000 gallons *and* the aggregate aboveground storage capacity does not exceed 1,320 gallons;
- Any container with a storage capacity less than 55 gallons at a facility, whether or not subject to the requirements of the SPCC rule; and
- Any facility or part thereof used exclusively for wastewater treatment.

Exclusions from storage capacity calculations include:

- Containers with a storage capacity of less than 55 gallons;
- Storage containers used exclusively in wastewater treatment;
- Completely buried tanks and associated piping and equipment that are subject to all of the technical requirements under 40 CFR part 280 or 281; and
- The capacity of any "permanently closed" aboveground storage container.

Security Requirement Amendment 40 CFR 112.7(g) - **The final rule amends existing SPCC security requirements for bulk plants to allow more flexibility. The final rule allows an owner or operator of a bulk plant to tailor security measures to specific characteristics and location of the bulk plant facility. The final rule eliminates onerous security requirements such as facility fencing, 24-hour monitoring and other security measures to prevent a release due to vandalism. Moreover, the rule does not require that a professional engineer approve the selected security measures. Instead, a facility owner or operator may select SPCC security requirements by including in the SPCC plan a description of the security methods used to accomplish each of the following:**

1. Secure and control access to all oil handling, process and storage areas,
2. Secure master flow and drain valves,
3. Prevent unauthorized access to starter controls and oil pumps,
4. Secure out-of-service and loading/unloading connections of oil pipelines, and
5. Address the appropriateness of security lighting to prevent acts of vandalism and assist in the discovery of oil discharges.

IMPORTANT! **The EPA is relying on the reasonable discretion of facility owners and operators to select effective security measures. While fencing and lighting are not required per se, these measures may be needed to secure bulk plants from vandals unless equally effective security measures are taken. In the event the EPA determines that selected security measures are ineffective, the facility will be found out of compliance with SPCC requirements.**

Secondary Containment for Parked Cargo Tank Vehicles Amendment 40 CFR 112.7(c) **–**

The final rule eliminates the *size* secondary containment requirements for cargo tank vehicles containing product that are parked at bulk facilities between deliveries (generally overnight). Under size secondary containment requirement, cargo tank vehicles containing product must be parked within structures capable of containing the content of the single largest compartment of the cargo tank vehicle.

The EPA has been aggressively enforcing this requirement in recent years forcing regulated community to build expensive secondary containment structures for cargo tank vehicles parked overnight at applicable facilities. Under the final rule, instead of meeting *sized* secondary containment requirements, parked cargo tank vehicles containing product are now subject to the less onerous *general* secondary containment requirements. The SPCC general secondary containment requirements allow owners and operators of a facility to plan for the control of the "*most likely discharge"* from a parked cargo tank vehicle rather than a

catastrophic rupture of the single largest compartment of the tank. The most likely discharge from a parked cargo tank vehicle is a leaky valve or hose.

These releases are small and may be addressed by providing inexpensive drip pans, absorbents or other response measures rather than building an expensive containment system of dikes, drains and oil water separators.

IMPORTANT! **The EPA is not placing a limit on the period of time cargo tank vehicles containing product may remain parked at a facility. However, the EPA is warning the change from *sized* secondary containment to *general* secondary containment requirements *does not* permit owners and operators of bulk plant facilities to use cargo tank vehicles as permanent storage in lieu of either aboveground or underground storage tanks. The agency will look at company records and other external factors to determine if cargo tank vehicles are used for delivery service or simply used as permanent storage.**

IMPORTANT! **Size secondary containment requirements still apply to cargo tank vehicles at loading racks. Under the SPCC regulations, loading racks *must* be equipped with size secondary containment sufficient to hold the content of the single largest compartment of the cargo tank vehicle tank.**

Residential Heating Oil Tank Exemption 40 CFR 112.1(d)(2) - **The final rule clarifies that residential heating oil tanks at single-family homes and farms are exempt from SPCC regulations. This exemption applies to aboveground containers as well as completely buried tanks. In addition, residential heating oil tanks at single family homes are not required to be counted for purposes of determining the 1320-gallon aggregate oil storage capacity that triggers SPCC compliance. However, the capacity of an oil heat tank at a non-residential home, such as used in buildings within a bulk plant facility must be counted towards the SPCC gallon threshold.**

OTHER CHANGES:

1. SPCC Plan reviews have been changed from every 3 years to every 5 years by owner/operator.
2. Tank non-destructive integrity testing (NDT) in accordance with industry standards. Typically when shop fabricated tanks are twenty years old. When repairs are done, integrity testing must be accomplished by companies/individuals certified by industry standards (STI, NFPA, API, PEI or PE). Horizontal tanks or enclosed/vertical tanks not in contact with the ground may only require external/visual inspection based upon PE review; EPA equivalent environmental protection and/or industry standards.
3. All buried piping that is installed or replaced after 8-16-02, must have protective coating and wrapping and cathodic protection, or meet 40 CFR part 280 or a state program. Repairs to piping require integrity testing.
4. Overfill prevention systems & alarms must be installed in accordance with industry standards and Fire Codes. Overfill prevention must be inspected/tested in accordance with industry standards. Vent whistles can be used at smaller facilities where vent whistle can be heard during tank filling. Another equivalent method as allowed: If a facility operator/driver will check containers visual tank gauge prior to the unloading process and allow driver/facility operator to check tank gauge during tank filling process at frequent intervals.
5. All “shoulds” in the existing regulation are changed to “must or shall” in the revised regulation.
6. Secondary containment systems or their equivalents for Bulk Tanks, Loading & Unloading Areas and Piping Systems must be sufficiently impervious. Compacted Clays, Concrete Liners/Membranes may meet this requirement upon PE review;
7. Security systems: Allows the facility owner/operator to tailor security measures to the facility’s specific characteristics and location. (Fencing & Area Lighting is no longer mandated)

8. The Facility diagram must include the location of the USTs (if applicable), type of oil in each AST and size, surface flow direction, loading/unloading areas, area lights, & aboveground piping;
9. Requires all Loading/Unloading Rack areas and aboveground piping to have secondary containment. When secondary containment is not practical from an engineering standpoint, then this would not be required. Some engineering reasons why this would not be required are; insufficient space, loading/unloading spill potential, adverse weather conditions (ice, snow that would cause a vehicular collision) in the area of the loading/unloading systems. The PE will make this determination.

COMPLIANCE DATES FOR MOST FACILITIES:

An onshore or offshore facility that was in operation on or before August 16, 2002 must maintain its plan, or amend it if necessary to ensure compliance on or before November 10, 2011. They must implement their amended plan as soon as possible, but not later than November 10, 2011. An onshore or offshore facility that became or will become operational from August 16, 2002 through November 10, 2011 and could reasonably be expected to have a discharge as described in 40 CFR 112.1(b) must prepare a plan on or before November 10, 2011. They must fully implement their plan as soon as possible, but not later than November 10, 2011. Any an onshore or offshore facility that becomes operational after November 10, 2011 and could reasonably be expected to have a discharge as described in 40 CFR 112.1(b) must prepare and implement a plan before it begins operations. An onshore or offshore mobile facility must amend its plan, if necessary, and implement such amendments by November 10, 2011

Most or all facilities that currently have SPCC Plans must amend (by Register Professional Engineer) these plans no later than November 10, 2011 The EPA requires that the revised amendment plan is implemented by November 10, 2011. Owners and professional engineers must become familiar with the new standards that have been established by the industry and will be enforced by EPA. The relevant industry standards are API 340, API 2610, API 653, API 12R1, API 570, API 2350, NFPA30, and STI-SP001-00.

COMPLIANCE DATES FOR FARMS THAT MEET THE QUALIFIED FACILITY CRITERIA.

A farm that meets the qualified facility criteria, starting operation...	*Must...*
On or before August 16, 2002	**Maintain its existing SPCC Plan Amend and implement the SPCC Plan no later than May 13, 2013**
After August 16, 2002 through May 13, 2013	**Amend and implement the SPCC Plan no later than May 13, 2013**
After May 13, 2013	**Prepare and implement a SPCC Plan before beginning operations**

What is a "farm" for purposes of the SPCC rule?

EPA defines a farm as "a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, $1,000 or more of agricultural products during a year."

SPCC Tier I & Tier II for Farms & Other Smaller Facilities
Check with States Engineering Boards to ensure that PE exemption applies to that State with small facilities. Some States do not allow US EPA's PE exemptions.

FOR SMALL FACILITIES INCLUDING FARMS THE FOLLOWING MAY APPLY:
Tier I & Tier II Requirements

IF THE FACILITY HAS…	AND	AND THE FACILITY HAS…	THEN
10,000 U.S. gallons or less aggregate aboveground oil storage capacity;	Within any twelve-month period, three years prior to the Plan certification date, or since becoming subject to the SPCC rule if in operation for less than three years, there has been: (1) No single discharge of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons; and (2) No two discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons	No individual aboveground oil containers greater than 5,000 U.S. gallons;	TIER I: Complete and self-certify Plan template (Appendix G to 40 CFR parts 112) in lieu of a full PE-certified Plan. (PE = Professional Engineer)
		Any individual aboveground oil container greater than 5,000 U.S. gallons;	TIER II: Prepare self-certified Plan in accordance with all applicable requirements of §112.7 and subparts B and C of the rule, in lieu of a PE-certified Plan. (NOTE-1)

The November 2009 & December 2008 amendments provided the owner or operator of a Tier I qualified facility with the option to complete a self-certified SPCC Plan template (found in Appendix G to 40 CFR part 112) in lieu of a full SPCC Plan. The owner or operator can complete the SPCC Plan template, which is comprised of a set of streamlined SPCC rule requirements, and implement those streamlined requirements, to comply with the SPCC regulation. The SPCC Plan template for Tier I qualified facilities is intended to facilitate the development of SPCC Plans at Tier I qualified facilities. Once completed and certified by the owner or operator, the Plan template serves as the SPCC Plan for the facility. As for any facility subject to the SPCC rule, the owner or operator must maintain a written copy of the Plan—which in this case would be the completed and self certified SPCC Plan template—at the facility or at the nearest field office if the facility is attended less than four hours per day (§ 112.3(e)(1)).

What are the qualified facility eligibility criteria?

A qualified facility is one that: has an aggregate aboveground oil storage capacity of 10,000 gallons or less; and has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons or no two discharges as described in §112.1(b) 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 Part 112 if the facility has been in operation for less than three years (other than discharges as described in §112.1(b) that are the result of natural disasters, acts of war, or terrorism).

A production facility may be eligible as a qualified facility under the oil storage capacity criteria above, or also if it meets the discharge history criterion above and has:
(1) for those facilities that do not have injection wells, no more than four producing wells per single tank battery, each of which produce ten barrels or less of crude oil per well per day; or
(2) no more than two producing wells per single tank battery, each of which produce ten barrels or less of crude oil per well per day and has one or more injection wells at the facility.

Simplified Plans for Facilities Under 10,000 Gals; Tier I Facilities 40 CFR 112.3(g)

(1) - **The final rule establishes streamlined compliance procedures for small facilities under 10,000 gallons of aggregate capacity with no single storage tank *greater than* 5,000 gallons. Under the final rule these bulk plants are designated as "Tier I Facilities". Owners and operators of Tier I Facilities may draft and self-certify SPCC plans or use a generic template plan adjusted to address the unique characteristics of the facility. Tier I Facilities are not required to comply with the following SPCC provisions; facility diagrams, facility description, loading and unloading racks, brittle fracture evaluation, facility drainage, facility transfer operations, and**

effluent treatment facilities. Involvement of a professional engineer is not required to prepare an SPCC plan for Tier I Facilities. In the alternative, owners and operators of Tier I Facilities may use a new EPA SPCC Plan template that contains a streamlined set of requirements. The EPA SPCC template for Tier I Facilities may be found at http://www.epa.gov/emergencies/content/spcc/index.htm. The template is at the end of the final rule in Appendix G.

Simplified Hybrid Plans for Facilities Under 10,000 Gals; Tier II Facilities 40 CFR 112.3(g)(2) **-The final rule establishes a "hybrid" simplified compliance approach for facilities with total aggregate tank capacity under 10,000 gallons but with a single tank capable of storing *over* 5,000 gallons. In the final rule, the EPA designates these facilities as "Tier II Facilities". The compliance requirements for these facilities remain unchanged under the final rule. Owners or operators are still permitted to draft, revise and self-certify SPCC plans. However, any deviation from the SPCC requirements must be certified by a professional engineer. Finally, the EPA clarified that the Appendix G SPCC streamlined plan template *may not* be used by Tier II facilities.**

NOTE 1: May prepare a Plan which includes PE-certified environmentally equivalent measures or impracticability determinations that would require PE certification for only the portions dealing with environmental equivalence and impracticability determinations. The remaining portions of the plan could be self-certified by the facility owner/operator (If your State PE Board allows).

Compliance dates for PRODUCTION FACILITIES that meet the qualified facility criteria.

A production facility that meets the qualified facility criteria, starting operation...	*Must...*
On or before August 16, 2002	**Maintain its existing SPCC Plan Amend and implement the SPCC Plan no later than November 10, 2010**
After August 16, 2002 through November 10, 2010	**Amend and implement the SPCC Plan no later than November 20, 2013**
After November 10, 2010	**Prepare and implement a SPCC Plan before beginning operations**

What is a "production facility" for purposes of the SPCC rule?

EPA defines a production facility as *"all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or intra-facility gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary non-transportation related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil (including condensate), or associated storage or measurement, and is located in an oil or gas field, at a facility." This definition governs whether such structures, piping, or equipment are subject to a specific section of the rule.*

SPCC RULE AMENDMENTS AND CLARIFICATIONS: (12-05-08)

The final rule addresses a number of SPCC compliance issues that are important to the regulated community including;

- ***New Definition of "Facility" 40 CFR 112.2*** **- The EPA clarified in the final rule that the owner or operator of a bulk plant has discretion in determining which contiguous or non-contiguous buildings structures, parcels etc. make up the *"facility"* for purposes of compliance with the SPCC rule. This change is important because it allows bulk plant operators to define the limits of the SPCC "facility" for purposes of compliance. The change allows bulk plant operators to separate or aggregate storage containers to determine facility boundaries and applicability of SPCC requirements.**
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- ***New Definition of "Loading Rack" 40 CFR 112.2*** **- Under the final rule, a *"loading/unloading rack"* means a fixed structure (such as a platform or gangway) necessary for loading or unloading a tank truck or rail tank car that is located at a facility subject to an SPCC plan. A loading rack includes an unloading arm and may include any combination of the following: piping, valves, pumps, shut off devices, overfill sensors or personnel safety devices. Under the new definition the EPA clarifies the limits of the loading/unloading rack area where *sized* secondary containment must be provided (sized secondary containment requires equipment sufficient to contain a release from the single largest compartment of the cargo tank vehicle). The loading/unloading rack area includes the loading arm.**

  According to the final rule, equipment present at a loading/unloading area where a pipe stand connects to a cargo tank vehicle or rail car is not considered a loading/unloading rack for purposes of compliance with the SPCC regulations.

  Where the loading rack attached to a UST system is located at a facility with 1320 gallons or less of aboveground storage capacity, or where no aboveground storage exists, secondary containment is *not* required for the UST loading rack and SPCC does not apply to the facility.

  However, where an exempt UST system at a bulk plant facility is attached to a *dispenser* rather than a loading/unloading rack, the dispenser area must only meet *general* secondary containment requirements sufficient to contain only the most likely discharge from the dispenser. Such general containment measures would include addressing dispenser spills with absorbent material or other response actions.

Tank Integrity Testing Amendment 40 CFR 112.8 (c) (6) and 40 CFR 112.12(c) (6)

See Guidance for Regional Inspectors - Chapter 7
Chapter 7 provides an overview of the SPCC inspection, evaluation, and testing requirements, as well as how environmental equivalence may apply for these requirements.
See: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors

The US EPA releases "Bulk Storage Container Inspection Fact Sheet" in August 2013. Highlights of Q&A:

See: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spill-prevention-control-and-countermeasure-11

How do I establish a baseline condition for my aboveground container?

Industry standards, such as API 653 and STI SP001, contain minimum requirements to inspect aboveground containers and criteria to assess each container's suitability for continued service. The baseline and suitability evaluation provides information on the container's existing condition relative to the design metal thickness and the rate of metal loss from corrosion as well as the anticipated remaining service. In some cases, where baseline information is not known, the testing program may include two data collection periods, one to establish a baseline of the container's existing shell and bottom plate thicknesses, and a second inspection to establish corrosion rates in order to develop the next inspection interval. These inspection intervals establish the frequency of the 'regular schedule' required for testing under the SPCC rule.

When no or only partial baseline information is available for a container(s) at the facility, then the owner/operator should schedule integrity testing in accordance with industry standards as soon as possible and in accordance with both good engineering practice and the judgment of the certifying PE. Because the SPCC Plan must be reviewed at the facility every five years in accordance with §112.5(b), you should consider to begin collecting inspection data during the next five year period. As an example, a facility owner/operator is scheduling upcoming inspections for bulk storage containers at a facility he recently purchased. The owner/operator has no records of inspections or information on the in-service date (i.e. original construction date) for a 10,000-gallon aboveground storage container at the facility. The SPCC Plan was last amended on November 10, 2011. Therefore, in order to establish a baseline for the

10,000-gallon AST, the facility owner schedules the first (baseline) container inspection or integrity test by November 10, 2016.

The implementation of the testing program should be in accordance with industry standards and establish appropriate inspection priorities among multiple containers at a facility. For instance, special consideration may be discussed in the Plan for containers for which the age and existing condition is not known (no baseline or only partial information exists); older containers; or those in more demanding service. These higher priority containers may be targeted for inspection in the schedule before other aboveground containers where the baseline information is known.

Section 112.7 of the rule states that 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. Therefore, if an owner or operator has yet to implement the integrity testing program, the SPCC Plan should establish and document a schedule (in accordance with good engineering practice and the introductory paragraph of 112.7) that describes the projected implementation of the integrity testing program for the aboveground bulk storage containers at the facility. The owner or operator must then implement the inspection program in accordance with the SPCC Plan.

Do I need to establish a baseline when the standard requires only visual inspections?

No, if the industry standard only requires visual inspections for the container (e.g., certain shop-built containers) then a baseline is not necessary. The standard establishes a frequency for visual inspections rather than basing the interval on the container's corrosion rate. On the other hand, a baseline is necessary for most non-destructive testing protocols, because the container's corrosion rate impacts the frequency/interval of future formal integrity testing inspections.

Owners and operators need to refer to the particular industry standard identified in the SPCC Plan to determine the scope of inspection and testing requirements. For example under the STI SP001 standard, visual inspection is allowed for portable containers such as drums and totes. A baseline determination of metal thickness of a portable container is not required prior to implementing the visual-only integrity testing inspection protocol. Can I visually inspect large shop-built oil storage containers to satisfy the integrity inspection and testing requirements of the SPCC rule?

Can I visually inspect large shop-built oil storage containers to satisfy the integrity inspection and testing requirements of the SPCC rule?

Yes, under certain circumstances visual inspection alone may suffice. However, the SPCC rule requires that inspections be in accordance with industry standards. For tanks larger than 5,000 gallons, most industry standards require more than a visual inspection by the owner or operator.

The SPCC Guidance for Regional Inspectors1 published in 2005 described an example that may be environmentally equivalent to the integrity testing requirements of the SPCC rule at that time. The example indicated that visual inspection plus certain additional actions to ensure the containment and detection of leaks may be appropriate for bulk oil storage containers with a capacity up to 30,000 gallons.

This example was based on a policy that described the environmental equivalence flexibility available to a PE with respect to integrity testing in a letter to the Petroleum Marketers Association of America (PMAA).2 This example was established at a time when the rule specifically required that integrity testing include more than just a visual inspection. While the approach for the use of environmental equivalence described in this letter is still valid, EPA revised the integrity testing provision in 2008 to allow inspection requirements outlined in industry standards to be used without the need for environmental equivalence determinations certified by a PE. A major industry standard for integrity testing (STI SP001) was modified since the letter to PMAA was written to outline ''good whether to certify an environmentally equivalent approach as described in the PMAA letter, or to follow an industry standard without having to certify the measures described in the PMAA letter as an environmentally equivalent method of integrity testing.

If an owner or operator wants to deviate from applicable industry standards to develop an integrity testing program, then a PE must certify an environmentally equivalent alternative in the SPCC Plan. Furthermore, the Plan must provide the reason for the deviation, describe the alternative approach (e.g. a site-specific or "hybrid" inspection program), and explain how it achieves environmental protection equivalent to the applicable industry standard.3

Can I use a site-specific (hybrid) inspection program instead of an industry standard?

Yes. Although the rule requires that you consider industry standards when developing an inspection program, you can incorporate an environmentally equivalent inspection program when you and the certifying PE decide that another inspection approach would be more appropriate or cost effective, based on site-specific factors. You can use an environmentally equivalent alternative when you include in your SPCC Plan the reason for deviating from the rule requirements and describe the alternative method in detail, including how it is environmentally equivalent.

An environmentally equivalent approach to following the applicable industry standard may be a site-specific (i.e., hybrid) inspection program that is based on elements designed to minimize the risk of container failure and allow detection of leaks before they impact navigable waters or adjoining shorelines. These elements may be based on a combination of various industry standards and good engineering practice.

If you are the owner or operator of a Tier II qualified facility and you choose to develop an alternative inspection program rather than follow an applicable industry standard, then you must have a PE certify the environmentally equivalent measures as described in §112.6(b)(4). You cannot deviate from applicable industry standards if you are the owner or operator of a Tier I qualified facility when following the requirements for Tier I qualified facilities in §112.6(a).

Can I use a site-specific (hybrid) inspection program to deviate from portions of an industry standard?

Yes, under certain circumstances it may be appropriate to deviate from portions of an industry standard. As you develop your inspection and/or testing program, you must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration and design. However, you and the certifying PE can decide to deviate from a portion of a standard when another approach would be more appropriate or cost effective, based on site-specific factors.

Your Plan should describe what industry standard applies, how the site-specific (hybrid) inspection program deviates from the applicable industry standard, and how the inspection program meets the minimal recommended elements of a hybrid inspection program.

What are some recommended elements for a site-specific integrity inspection and/or testing program (hybrid inspection program)?

The hybrid program should be designed to measure the structural soundness of a container shell, bottom, and/or floor to contain oil, and may include leak testing to determine whether the container will discharge oil. The components of a hybrid inspection program would likely include frequent visual inspections by the owner, as well as periodic inspections (plus testing as appropriate) by a certified inspector. Alternatively, the PE can recommend an inspection program following a specific standard, even when the standard does not specifically identify the container in its scope, if he believes that the inspection elements of that standard are appropriate for the container(s) at the facility and in accordance with good engineering practices.

Any hybrid inspection program should include an evaluation of the principal elements that would cause a tank to fail, and how the inspection program addresses finding such conditions, or prevents such conditions from continuing to the point of failure. For example, internal and external corrosion conditions must be considered, and a testing method developed to assure that the condition is identified and measured. Conditions that may lead to a structural failure should be identified, for example a failing foundation, and evaluation methods developed to identify the condition.

In all cases, careful consideration should be given to discovering such conditions that may not be identifiable from visual examination, such as the bottom of floor plates. Hybrid programs should also include evaluation of container modifications made since last examination that may degrade integrity or lead to failure.

The Steel Tank Institutes (STI SP-001) "STANDARD FOR THE INSPECTION OF ABOVEGROUND STORAGE TANKS" includes a "Table of Inspection Schedules" which the PE may use to help the owner comply with Tank Integrity Testing requirements if applicable. The STI Standard is intended for use by organizations and/or individuals who are knowledgeable

and experienced in aboveground tank inspection. Applicable federal, state and local laws, regulations and industry standards concerning tank inspection shall also be consulted. (See inspection schedule in model SPCC Plan for more information on STI and other industry standards.)

On November 20, 2008 The US EPA amended paragraphs 112.8 (c) (6) and 112.12 (c) (6) to provide flexibility in complying with the bulk storage integrity testing requirements. Specifically, EPA is modifying the provisions to allow an owner or operator to consult and rely on industry standards to determine the appropriate qualifications for tank inspectors/testing personnel and the type and frequency of integrity testing required for a particular container size and configuration.

Within the rule commentary, EPA mentions that industry standards are technical guidelines created by experts in a particular industry for use throughout that industry. Such guidelines assist in establishing common levels of safety and common practices for manufacture, maintenance, and repair. Created by standard-setting organizations, inspection standards, such as the STI SP001 Standard for Inspection of Aboveground Storage Tanks, provide differentiated inspection requirements for containers of various sizes and configurations that also allows for visual inspection of smaller containers.

US EPA SPCC 2008 revisions Rule Commentary—Federal Register Page 74264

"Under the revised provision, a facility owner or operator may still deviate from the rule provision, or from an industry standard, if the alternate measure is equivalent to the environmental protections provided by the rule requirement (as provided in § 112.7(a)(2)). In this case, a PE would need to certify the reason for the deviation and that the alternate measures are environmentally equivalent"

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"EPA notes that use of a particular standard is voluntary; however, when a standard (or any part of a standard) is incorporated into a facility's SPCC Plan, then adherence to that standard (or part of a standard) is mandatory for implementation of the SPCC Plan. It should also be noted that these amendments do not restrict the use of environmental equivalence, including establishing differentiated inspection requirements for shop-built tanks versus field-erected tanks, and other alternatives suggested by commenter's. Owners or operators still have the ability to develop alternative, environmentally equivalent integrity testing procedures for bulk storage containers in accordance with § 112.7(a)(2). These equivalent measures must be in accordance with good engineering practice and are subject to certification by a PE.

EPA described the environmental equivalence flexibility available to a PE with respect to integrity testing in a letter to the PMAA. While the policy and approach for the use of environmental equivalence described in this letter is still valid, the approach taken in this final rule amending the integrity testing requirements allows inspection requirements outlined in industry standards to be used without the need for environmental equivalence determinations certified by a PE. A major industry standard for integrity testing (STI SP001) was modified since the letter to PMAA was written to outline ''good engineering practice'' for integrity testing of shop-built containers. This may affect a PE's decision whether to certify an environmentally equivalent approach as described in the PMAA letter, or to follow the industry standard as provided by the amendment finalized in this rule."

The EPA amendments to the SPCC allow such industry standards to be used without the need for environmental equivalence. EPA notes that although the use of standards is voluntary, but *when the standard is incorporated into a facility's SPCC Plan, adherence to that standard is mandatory* for implementation of the SPCC Plan. The STI Standard provides the minimum inspection requirements and the minimum evaluation criteria required to determine the suitability for continued service of aboveground storage tanks until the next scheduled inspection.

The final rule allows owners and operators of regulated facilities to determine the scope and frequency of tank integrity testing that is appropriate according to site specific condition (type and age of tanks, etc) for all classes of bulk storage containers. Recognized industry standards for integrity testing are *not* considered alternative methods for compliance. Therefore, a professional engineer is not required to make in the SPCC plan a determination that the use of recognized standards for integrity testing is equally protective to the environment as requirements set forth in the SPCC regulations. The rule clarifies that where an alternative integrity testing procedure is used which is *not* a recognized industry standard, it must be based on "good engineering practices" and must be certified by a professional engineer that the method is environmentally equivalent to protections set forth in the SPCC regulations.

The rule continues to recognize settlement language with PMAA that allows visual integrity testing for elevated shop erected tanks less than 30,000 gallons where all four sides of the tank are visible for inspection. Under the settlement, a professional engineer must establish the scope and frequency of an alternative testing method according to good engineering practices. The professional engineer must also include a determination in the SPCC plan that the method is the environmental equivalence of recognized national standards.

The EPA also clarified in the final rule that since the settlement with PMAA, a recognized national standard for visual tank integrity assessment has been developed. The Steel Tank Institute's STI-SP001 *Standard for Inspection of Aboveground Storage Tanks* was recently modified to outline good engineering practices for visual inspection of shop erected tanks and may be used without a determination in the SPCC plan by a professional engineer of environmental equivalence.

For a copy of US EPA's letter to the Petroleum Marketers Association of America (PMAA) on tank integrity testing equivalent environmental protection go to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/letter-daniel-gilligan-petroleum-marketers

EPA Defines Navigable Waters under the CWA

***Navigable Waters Amendment 40 CFR 112.2* - On November 20, 2008, EPA promulgated another final rule to amend a Clean Water Act (CWA) section 311 regulation that defines the term *"navigable waters."* The EPA was forced to make the revisions to the definition of *navigable waters* pursuant to successful lawsuit brought by a group of industry representatives, including API and PMAA. The lawsuit alleged that the EPA violated its own rulemaking requirements when it adopted the new definition of *navigable waters* which placed additional compliance burdens on bulk plant owners and operators subject to the SPCC regulations. The U.S. District Court for the District of Columbia issued an order for the EPA to vacate the revised definition of navigable waters and to reinstate the narrower 1973 version. The new final rule does not amend the definition of *"navigable waters"* in any other regulation that has been promulgated by EPA. The restored 1973 definition of n*avigable waters* for purposes of complying with the SPCC regulations is:**

"The term *"navigable waters"* of the United States means "navigable waters" as defined in section 502(7) of the FWPCA, and includes: (1) all navigable waters of the United States, as defined in judicial decisions prior to the passage of the 1972 Amendments of the Federal Water Pollution Control Act, (FWPCA) (Pub. L. 92-500) also known as the Clean Water Act (CWA), and tributaries of such waters as; (2) interstate waters; (3) intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and (4) intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce."

On November 20, 2008, EPA promulgated a final rule to amend a Clean Water Act (CWA)

section 311 regulation that defines the term "navigable waters." In this action, EPA announced the vacatur (an order of court by which a proceeding is set aside or annulled) of the July 17, 2002, revisions to the definition of "navigable waters" in accordance with an order, issued by the United States District Court for the District of Columbia (D.D.C.) in American Petroleum Institute v. Johnson, 571 F.Supp.2d 165 (D.D.C. 2008), invalidating those revisions. The court decision also restored the regulatory definition of "navigable waters" promulgated by EPA in 1973; consequently, EPA is amending the definition of "navigable waters" in part 112 to comply with that decision. This final rule does not amend the definition of "navigable waters" in any other regulation that has been promulgated by EPA.
In the order, the Court vacated and remanded the 2002 amendments to the Spill Prevention Control and Countermeasure (SPCC) regulatory definition of the term "navigable waters" on procedural grounds under the Administrative Procedure Act. **The court restored the previous definition of "navigable waters" included in the 1973 SPCC Rule pending further rulemaking or other appropriate agency action.** The Agency is studying the opinion and may provide additional guidance on the definition of "navigable waters." The 1973 regulatory definition of "navigable waters" for the SPCC rule was published in the Federal Register on December 11, 1973 (see 38 FR 34165) and reads as follows:

The 1973 regulatory definition of "navigable waters" for the SPCC rule was published in the Federal Register on December 11, 1973 (see 38 FR 34165) and reads as follows:
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EPA Defines "Oil"

§112.2 ***Oil means 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.***

The U.S. Coast Guard (USCG) compiled a list of substances it considers oil, based on the CWA definition. The list is available on the USCG Web site at http://www.uscg.mil/vrp/faq/oil.shtml Note, however, that the USCG list is not comprehensive and does not define "oil" for purposes of 40 CFR part 112. EPA may determine that a substance, chemical, material, or mixture is an oil even if it is not on the USCG list.

EPA interprets the Clean Water Act definition of oil to include non-petroleum oils as well as petroleum and petroleum-refined products. Non-petroleum oils include synthetic oils, such as silicone fluids, tung oils, and wood-derivative oils, such as resin/rosin oils, animal fats and oil, and edible and inedible seed oils from plants. Many non-petroleum oils have similar physical properties as petroleum-based oils; for example, their solubility in water is limited, they both create slicks on the surface of water, and they both form emulsions and sludge's. In addition, non-petroleum oils tend to be persistent, remaining in the environment for long periods of time.

Hazardous substances that are neither oils nor mixed with oils are not subject to SPCC rule requirements. See 40 CFR Part 116 designates CWA hazardous substances- Pure Benzene, Toluene & Xylene are on this list.

Outline of SPCC Plan

A. GENERAL DESCRIPTION
B. DESCRIPTION OF SPILL EVENTS WITHIN PAST 12 MONTHS
C. SPILL PREDICTIONS: DIRECTIONS, RATE OF FLOW, QUANTITY
D. GENERAL REQUIREMENTS: CONTAINMENT, DIVERSIONARY STRUCTURES
E. ALTERNATIVE STRONG OIL SPILL CONTINGENCY PLAN
(Emergency Procedures that will be use when a discharge occurs)
F. SPECIFIC REQUIREMENTS

1. Drainage from containment structures
2. Oil Storage Tanks
3. Facility Transfer
4. Loading and Unloading Facilities
5. Inspection and Test Records
6. Security
7. Personnel Training and Spill Prevention Procedures
8. Precipitation Release Schedule

APPENDICES

A: Substantial Harm Determination
B: Facility Inspection Checklists
C: Record of Precipitation Release from Secondary Containments
D: Record of Discharge Prevention Briefings and Training
E: Calculation of Secondary Containment Capacity
F: Agency Notification Standard Report
G: Discharge Notification Form
H: Discharge Response Equipment Inventory
I: Site Plan Map and Facility Diagram

PART 2: A model spill plan is as follows with comments from US EPA/AUTHOR included: **A 52 page US EPA sample Spill Plan (Appendix D, E & F) can be downloaded at: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors BLUE VERBIAGE IS FEDERAL REGULATIONS OR COMMENTS FROM U.S. EPA/AUTHOR.**

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

Reference: Federal Regulation 40 CFR Part 112, Dated July 17, 2002
Type of Facility: Petroleum Marketing Bulk Plant Facility
Facility was operational in late 1950's and the SPCC Plan has been fully implemented since October 1975.

Facility:	**Mayberry Oil Company**
Street Address:	**101 Fife Avenue**
City, State, Zip:	**Siler City, North Carolina 27344**
Site GPS Location:	**N35º 13.81'; W80º 49.57'**
Home Office:	**2300 Manteo Way, Mount Pilot, NC**
SPCC Plan Prepared By:	**Wallies Engineering Services** **1000 Ernest T Bass Parkway** **Mayberry, NC 027701**

The intent of this document is to provide information to Owner/Operator and US EPA for environmental control of Petroleum Products. It will not serve as construction documents, equipment approvals, building code permits or any other intent. WARNING: This plan and specifications are each part of an integrated design system. Any modification, alteration, change, deletion, addition, or substitution, of or to any specification(s) could result in property damage, injury, or even death, and requires a full review of the entire system by a professional engineer. Any unauthorized modification of this document may constitute unlicensed practice as a Professional Engineer and may constitute a crime.

EMERGENCY CONTACT LIST AND TELEPHONE NUMBERS
(Ref. 112.7)

1. **Local Fire Department: - 911____**
2. **"Person-In-Charge" of Facility Spill Response:**
   Home Telephone Number and Street Address:
   Name:
   Home Address:
   Home Phone:
   Home Office Phone:
3. **Local Emergency Planning Committee or Haz-Mat Response Team, Telephone Number: Chatham County Emergency Management; 919-542-2911, Pittsboro, NC**
4. **Emergency Cleanup Contractor or Response Facility Name, Telephone Number:**
5. **State Division of Environmental Management: 919-733-5291 (must call)**
6. **State Emergency Response Commission: 1-800-451-1403 (must call)**
7. **Downstream Water Suppliers who need to be notified:**
8. **National Response Center: 1-800-424-8802 (must call)**

(See APPENDIX G & H for Documentation)
You must report a spill if:
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.
Reporting a hazardous substance release or oil spill takes only a few minutes. To report a release or spill, contact the federal government's centralized reporting center, the National Response Center (NRC), at 1-800-424-8802. The NRC is staffed 24 hours a day by U.S. Coast Guard personnel, who will ask you to provide as much information about the incident as possible. If possible, you should be ready to report the following:
Your name, location, organization, and telephone number
Name and address of the party responsible for the incident
Date and time of the incident
Location of the incident Source and cause of the release or spill
Types of material(s) released or spilled
Quantity of materials released or spilled
Danger or threat posed by the release or spill
Number and types of injuries (if any)
Weather conditions at the incident location
Any other information that may help emergency personnel responds to the incident

In the event of a spill, the normal course of action is as follows: SEE PAGES 46 & 47

EXAMPLE TABLE OF CONTENTS

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INTRODUCTION

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by this facility to prevent oil discharges from occurring, and to prepare Mayberry Oil (i.e. This Facility) to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge.

This Plan has been prepared to meet the requirements of Title 40, Code of Federal Regulations, Part 112 (40 CFR part 112), and supersedes any earlier Plan developed to meet provisions in effect since 1974.

In addition to fulfilling requirements of 40 CFR part 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

The facility management has determined that this facility does not pose a risk of substantial harm under 40 CFR part 112, as recorded in the "Substantial Harm Determination" included in APPENDIX A of this Plan.

This Plan provides guidance on key actions that this facility must perform to comply with the SPCC rule:

- **Complete monthly and annual site inspections as outlined in the Inspection, Tests, and Records section of this Plan (pages 17 & 18) using the inspection checklists included in APPENDIX B.**
- **Perform preventive maintenance of equipment, secondary containment systems, and discharge prevention systems described in this Plan as needed to keep them in proper operating conditions.**
- **Conduct annual employee training as outlined in the Personnel, Training, and Spill Prevention Procedures section of this Plan and document them on the log included in APPENDIX D.**
- **If either of the following occurs, submit the SPCC Plan to the EPA Regional Administrator (RA) Office along with other information as detailed in APPENDIX G & H of this Plan:**
- **The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event; or**
- **The facility discharges oil in quantity greater than 42 gallons in each of two spill events within any 12-month period.**
- **Review the SPCC Plan at least once every five (5) years and amend it to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been proven effective in the field at the time of the review. Plan amendments, other than administrative changes discussed above, must be recertified by a Professional Engineer on the certification page (page 9) of this Plan.**
- **Amend the SPCC Plan within six (6) months whenever where is a change in facility design, construction, operation, or maintenance that materially affects the facility's spill potential. The revised Plan must be recertified by a Professional Engineer (PE).**
- **Review the Plan on an annual basis. Update the Plan to reflect any "administrative changes" that are applicable, such as personnel changes or revisions to contact information, such as phone numbers. Administrative changes must be documented in the Plan review log on page 9 of this Plan, but do not have to be certified by a PE.**

GENERAL SPILL PREVENTION CONTROLS AND COUNTERMEASURES REQUIREMENTS
(Ref. 112.7 (a) (b) (c) & 112.8 (a) (b) (c) (d)

FROM US EPA GUIDANCE &/OR REGULATIONS

112.7(a) (1) Include a discussion of your facility's conformance with the requirements listed in this part.
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.

112.7(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b). 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. 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;
(iii) Culverting, gutters, or other drainage systems;
(iv) Weirs, booms, or other barriers;
(v) Spill diversion ponds;
(vi) Retention ponds; or
(vii) Sorbent materials.
(2) For offshore facilities:
(i) Curbing or drip pans; or
(ii) Sumps and collection systems.
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.
112.8(b) Facility drainage. (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.
112.8(c) Bulk storage containers. (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.
11.8 (d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also catholically 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.

Title 40, Part 112 of the Code of Federal Regulations, final rule amending requirements under 40 CFR 112, July 17, 2002. This part establishes procedures, methods and equipment, and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines. These regulations are applicable to owners or operators of onshore and offshore facilities engaged in producing, storing, transferring, distributing, and/or consuming oil and oil products. EPA has published final amendments to the SPCC rule. This rule amended an existing rule that had been in effect since 1974. This final rule was effective on August 16, 2002 and included dates by which a facility would have to amend and implement its SPCC plan. The EPA subsequently extended the compliance dates. The compliance deadline for revision and professional engineer (PE) certification of SPCC plans is July 1, 2009. The Plans must be implemented by July 1, 2009.
Key Provisions of the Oil Pollution Prevention Regulation
Subpart A – Applicability, Definitions, and General Requirements. For All Facilities and All Types of Oil. Section 112.1 General Applicability: Section 112.2 Definitions: Section 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan: Section 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator: Section 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators: Section 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans
Subpart B – Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

Section 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities): Section 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities: Section 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities: Section 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities

Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels. Section112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities) 112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities. 112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities. 112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart D—Response Requirements

112.20 Facility response plans. 112.21 Facility response training and drills/exercises.

APPENDIX A TO PART 112—MEMORANDUM OF UNDERSTANDING BETWEEN THE SECRETARY OF TRANSPORTATION AND THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY.
APPENDIX B TO PART 112—MEMORANDUM OF UNDERSTANDING AMONG THE SECRETARY OF THE INTERIOR, SECRETARY OF TRANSPORTATION, AND ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY
APPENDIX C TO PART 112—SUBSTANTIAL HARM CRITERIA
APPENDIX D TO PART 112—DETERMINATION OF A WORST CASE DISCHARGE PLANNING VOLUME
APPENDIX E TO PART 112—DETERMINATION AND EVALUATION OF REQUIRED RESPONSE RESOURCES FOR FACILITY RESPONSE PLANS
APPENDIX F TO PART 112—FACILITY-SPECIFIC RESPONSE PLAN
PART 113—LIABILITY LIMITS FOR SMALL ONSHORE STORAGE FACILITIES

Subpart A—Oil Storage Facilities § 113.1 Purpose. § 113.2 Applicability. § 113.3 Definitions.

The prevention of oil spillage and its reaching navigable water is inherent in the design of the bulk plant's physical facilities and operating procedures that will be discussed in detail in subsequent paragraphs. Physical facilities feature storage designs, which include provisions to prevent unauthorized access and thereby insure accountability. Storage tank ullages can be determined, both to prevent overfilling as well as to serve as leak detection capability. Spillage resulting from equipment failure such as broken valves, hose failure, etc. will be contained within secondary containments or diverted too such. The secondary containments are described in subsequent paragraphs. Although operating procedures include precautionary measures to prevent or anticipate overfills, unexpected discharges due to equipment failure, and smaller "house-keeping" drippages, this Plan also addresses contingent and emergency situations which will relate to spill reporting, emergency containment, spill stoppage, safety assurance, and remedial action. If physical facilities do not meet 40-CFR 112 specifications regarding fully effective discharge collection and containment, a full-scope contingency plan, reference 112.7(d) & part 109, will be developed as part of this Plan. Regardless, however, an adequate amount of contingency planning is made for this facility to provide for personnel responsibilities and contact information, spill-response resources and telephone numbers, spill-reporting telephone numbers, and access to dedicated spill-response equipment.

Part 1: Plan Administration

Management Approval and Designated Person (40 CFR 112.7)

FROM US EPA GUIDANCE &/OR REGULATIONS

112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter "SPCC Plan" or "Plan)," in writing, and in accordance with § 112.7, and any other applicable section of this part.

112.3(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.
(1) By means of this certification the Professional Engineer attests:
(i) That he is familiar with the requirements of this part;
(ii) That he or his agent has visited and examined the facility;
(iii) 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;
(iv) That procedures for required inspections and testing have been established; and
(v) That the Plan is adequate for the facility.
(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

This facility is committed to preventing discharges of oil to navigable waters and the environment, and to maintaining the highest standards for spill prevention control and countermeasures through the implementation and regular review and amendment to the Plan. This SPCC Plan has the full approval of this facilities management. This facility has committed the necessary resources to implement the measures described in this Plan.

The Facility Manager is the Designated Person Accountable for Oil Spill Prevention at the facility and has the authority to commit the necessary resources to implement this Plan.

Authorized Facility Representative (facility response coordinator):

Name: Aunt Bee **Title:** Owner

Signature: Aunt Bee

Date: January 01, 2017

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of Part 112 of Title 40 of the Code of Federal Regulations (40 CFR part 112) and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR part 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility. [40 CFR 112.3(d)]

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

This engineer nor his agent did not test for proper operation of any electrical/mechanical/safety equipment, overfill devices, vents, emergency venting, valves, corrosion control systems and any other equipment systems not specifically mentioned.

Name: Gomer Pyle, PE # 122212
Wallies Engineering Services, 123 Griffin Ave., Mount Airy, NC 27222: 336-782-4412

Signature: Gomer Pyle **(SEAL)**
Date: January 01, 2017

Location of SPCC Plan (40 CFR 112.3(e))

FROM US EPA GUIDANCE &/OR REGULATIONS

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 …

In accordance with 40 CFR 112.3(e), a complete copy of this SPCC Plan is maintained at the facility in the office building. The front office is attended whenever the facility is operating, i.e., 7:00 AM to 5:00 PM, 5 days per week (closed on Saturdays & Sundays).

Plan Review (40 CFR 112.3 and 112.5)

FROM US EPA GUIDANCE &/OR REGULATIONS

112.5 (a) Amend the SPCC Plan for your facility in accordance with the general requirements in § 112.7, and with any specific section of this part 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). Examples of changes that may require amendment of the Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility. An amendment made under this section must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

112.5(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. The following words will suffice, "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result."

11.5 (c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with § 112.3(d).

Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), this facility periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- **commissioning of containers;**
- **reconstruction, replacement, or installation of piping systems;**
- **construction or demolition that might alter secondary containment structures; or**
- **changes of product or service, revisions to standard operation, modification of testing/inspection procedures, and use of new or modified industry standards or maintenance procedures.**

Amendments to the Plan made to address changes of this nature are referred to as technical amendments, and must be certified by a PE. Non-technical amendments can be done (and must be documented in this section) by the facility owner and/or operator. Non-technical amendments include the following:

1. **change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or**
2. **change in the name or contact information of spill response or cleanup contractors.**

This facility must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but no later than six months from the date of the amendment. The Facility Manager is responsible for initiating and coordinating revisions to the SPCC Plan.

Scheduled Plan Reviews

In accordance with 40 CFR 112.5(b), this facility will review this SPCC Plan at least once every five years. Revisions to the Plan, if needed, are made within six months of the five-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR112.3(d). Owner/operator documentation to review shall state: "I have completed review and evaluation of the SPCC plan for this facility and will (will not) amend Plan as a result."

Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded in the Plan Review Log (Table 1 page 9). This log must be completed even if no amendment is made to the Plan as a result of the review. Unless a technical or administrative change prompts an earlier review of the Plan, the next scheduled review of this Plan must occur by February 8, 2016.

Facilities, Procedures, Methods, or Equipment Not Yet Fully Operational (40 CFR 112.7)

Bulk storage containers at this facility have never been tested for integrity since their installation. Pages 17 & 18 and APPENDIX B of this Plan describes the inspection program to be implemented by the facility following a regular schedule, including the dates by which each of the bulk storage containers must be tested.

Table 1: Plan Review Log

By	Date	Activity	PE certification required?	Comments

***Previous PE certifications of this Plan are summarized below.**

PE Reviews

Date	Scope	PE Name	Licensing State and Registration No.

Cross-Reference with SPCC Provisions (40 CFR 112.7)

FROM US EPA GUIDANCE &/OR REGULATIONS

112.7 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.

This SPCC Plan does not follow the exact order presented in 40 CFR part 112. Section headings identify, where appropriate, the relevant section(s) of the SPCC rule. Table 2 presents a cross-reference of Plan sections relative to applicable parts of 40 CFR part 112

Table 2 Regulatory Cross Reference Table

Regulatory Section/Rule(s)	Summary Rule Description	Plan Section(s)/Page No.
112.7 (a)	General Requirements	
	(1) Discussion of facility's conformance with requirements	Introduction/Pg.-5; General Requirements/Pg.-6
	(2) Deviations from Plan requirements	Pgs.-16 & 17 & APPENDIX B
	(3) Facility characteristics relevant to Plan requirements	Facility Information/Pg.-12; Facility Description/Pg.-12; General Requirements/Pg.-6
	i. Type of oil in each container with storage capacity	Petroleum Product Storage/Pg.-22
	ii. Discharge prevention measures with procedures for routine handling	Discharge Prevention./Pgs.-15 & 16
	iii. Discharge or drainage controls	Facility Drainage/Pg.-21
	iv. Methods of disposal of recovered materials	Drainage from Diked Areas /Pg.-21 & 25
	v. Contact list for facility response coordinators	Page-2
	(4) Information and procedures for incident responses	Response to Spills Pgs.-24 & 25
	(5) Spill and emergency response procedures	Response to Spills Pgs.-24 & 25
	i. Quick reference summary information for facility emergency procedures	Response to Spills Pgs.-24
	ii. Information in supporting appendices	APPENDIX-D, G, & H
112.7 (b)	Fault Analysis	
	i. Procedures when discharge occurs	Response to Spills Pgs.-24 & 25
112.7 ©	Secondary Containment	Containment and Diversionary Struct./Pg.-16
112.7 (d)	Contingency Planning	(if required)
	i. Periodic integrity testing of containers	APPENDIX K (if required)
	ii. Periodic integrity and leak testing of valves and piping	APPENDIX K (if required)
	iii. Oil spill contingency plan	APPENDIX K (if required)
	iv. Written commitment of manpower and resources	APPENDIX K (if required)
112.7 (e)	Inspections, tests, and records	Inspections, Tests and Records/Pg. 17 &18
112.7 (f)	Employee training and discharge prevention procedures	APPENDIX E Record of Training
	i. Training of oil-handling personnel	Personnel, Training and Spill Prevention Procedures/Pg. 17 & 18
	ii. Designated discharger prevention accountable persons	Personnel, Training and Spill Prevention Procedures/Pg. 18 & 19
	iii. Schedule of personnel discharge prevention briefings	Personnel, Training and Spill Prevention Procedures/Pg. 18 &19
112.7(g)	Facility Security	
	(1) Fully fenced facility	Security/Pg. 19
	(2) Master flow and drain valve security	Security/Pg. 19
	(3) Oil pump/transfer control security	Security/Pg. 19
	(4) Security of loading/unloading connections	Security/Pg. 19
	(5) Facility lighting to prevent vandalism and theft	Security/Pg. 19
112.7 (h)	Tank truck loading/unloading procedures	
	(1) Catchment basin or quick discharge system	Tank Car & Truck Loading/Unloading /Pg. 20
	(2) Means to prevent truck drive-aways	Tank Car & Truck Loading/Unloading /Pg. 20

	(3) Inspection of tanker truck drains/outlets	Tank Car & Truck Loading/Unloading /Pg. 20
112.7 (l)	Brittle fracture evaluation requirements	N/A
112.7 (j)	Conformance with State and Local Requirements	State Rules/Pg.-15 & 21
112.8 (a);	Requirements for on-shore facilities	General Requirements/Pg.-6
112.8 (b)	Facility drainage restrictions	
	(1) Drainage from diked storage areas	Facility Drainage/ Pg. 21
	(2) Valve restrictions	Facility Drainage/ Pg. 21
	(3) Drainage of undiked areas	Facility Drainage/ Pg. 21
	(4) Use of diversions systems	N/A
	(5) Drainage Water Treatment	N/A
112.8 ©	Bulk storage containers	
	(1) Material and construction compatibility with contents	Bulk Storage Tanks/Pg. 22
	(2) Secondary containment	Containment and Diversionary Struct./Pg. 16
	(3) Control of accumulated precipitation	Drainage from Diked Areas/Pg. 21
	(4) UST corrosion protection	N/A
	(5) Corrosion protection of partially buried or bunkered tanks	N/A
	(6) Testing of aboveground containers	Inspections, Tests and Records/Pg. 17 & 18 Bulk Storage Tanks/Pg. 22 APPENDIX B
	(7) Monitoring of internal tank heating coils	N/A
	(8) Engineering controls to prevent discharges	Bulk Storage Tanks/Pg. 16
	(9) Observation of effluent treatment facilities	N/A
	(10) Prompt repair of visible discharges from equipment	Bulk Storage Tanks/Pg. 17 &18
	(11) Positioning/location of mobile containers to prevent discharges	N/A
112.8 (d)	Facility transfer operations, pumping, and facility processes	
	(1) Corrosion protection of underground piping	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(2) Protection of transfer piping connections	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(3) Use of proper piping supports	Transfer Operations, Pumping and Facility Processes/Pg. 23
	(4) Regular inspection of aboveground valves, pipes, and appurtenances	APPENDIX B; Transfer Operations, Pumping and Facility Processes/Pg. 17
	(5) Warning procedures to prevent vehicular damage to aboveground piping	Transfer Operations, Pumping/Pg. 20

Part 2: General Facility Information

Name: Mayberry Oil Company
Address: 101 Phife Avenue
Mayberry, NC 02000
Office Phone: (336) 782-4414

Type: **Bulk storage distribution facility**

Date of Initial Operations: **May 20, 1960**

Owner/Operator: **Andy Enterprises**
1000 Oak Twig Drive
Manteo, NC 20001

Primary contact: **Barnie Phife, Facility Manager**
Work: (336) 782-4414
Cell (24 hours): (336) 782-8818

Facility Description (40 CFR 112.7(a) (3))

FROM US EPA GUIDANCE &/OR REGULATIONS

112.7(a) (3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried 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. You must also address in your Plan: …..

Facility Description (40 CFR 112.7(a) (3))

Hours of operation are between 7:00 AM and 5:00 PM, 6 days per week. This operation consists of a bulk plant featuring 7 aboveground storage tanks, and 1 bulk loading rack. All bulk deliveries of liquid petroleum products made to this operation are received from truck-transport tankers and are transferred by transfer pumps into the tanks. Products stored are Fuel Oil No. 2, Kerosene, Gasoline, and Diesel. The warehouse can house up to 3,000 gallons of Hydraulic Lubrication oils in various sized containers not over 55 gallons.

The bulk plant supplies products to loading racks where transfers are made to "tankwagon" vehicles and smaller bulk deliveries to residential and commercial customers in the surrounding areas of Siler City, North Carolina. For facilities with aboveground/underground storage tanks the pumps are arranged to transfer petroleum from transport tankers into the tanks and, concurrently, supply products to the loading racks for local deliveries. Petroleum dispensing to motor vehicles does occur at this facility.

Generally, many physical facilities and operational procedures are patterned after guidelines of the National Fire Protection Association's Pamphlet 30 & 30A (Combustible and Flammable Liquids Code) and State and County Building Codes. NFPA 30 is also a partial reference for the U.S. Environmental Protection Agency's Regulation, 40 CFR-Part 112, "Oil Pollution Prevention." Other relevant industry standards are API 340, API 2610, API 653, API 12R1, API 570, API 2350, PEI-RP200 and STI-SP003. Newly constructed facilities must meet the above standards, where applicable.

A supplemental drawing is appended which shows property boundaries, access drainage patterns, on-site buildings, access roads, petroleum storage facilities and general configuration of the bulk plant. This facility is located near the intersection of West Dolphin Drive and Fife Street.

Enclosed is a partial map of the area in APPENDIX J.

Evaluation of Discharge Potential (Ref. 112.7(b))

FROM US EPA GUIDANCE &/OR REGULATIONS

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.

Table 3: Potential Discharge Volumes and Direction of Flow

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Bulk Storage Area (Aboveground Storage Tanks)				
Failure of aboveground tank (collapse or puncture below product level)	20,000	Gradual to instantaneous	SW to Silver Creek	Concrete dike
Tank overfill	1 to 120	60 gal/min	SW to Silver Creek	Concrete dike
Pipe failure	20,000	240 gal/min	SW to Silver Creek	Concrete dike
Leaking pipe or valve packing	600	1 gal/min	SW to Silver Creek	Concrete dike
Leaking heating coil (Tank #7)	10,000	1 gal/min	SW to Silver Creek	Concrete dike
Loading Rack/Unloading Area				
Tank truck leak or failure inside the rollover berm	1 to 2,000	Gradual to instantaneous	SW to Silver Creek	Rollover berm, on to oil/water separator
Tank truck leak or failure outside the rollover berm	1 to 2,000	Gradual to instantaneous	SW to Silver Creek	Rollover berm, on to oil/water separator
Hose leak during truck loading	1 to 300	60 gal/min	SW to Silver Creek	Rollover berm
Fuel Dispensing Areas				
Tank #4 and diesel dispenser hose/ connections leak	1 to 150	30 gal/minute	SW to Silver Creek.	Land-based spill response capability (spill kit) and oil/water separator
Maintenance Buildings/Warehouse				
Leak or failure of drum	1 to 55	Gradual to instantaneous	SW to Silver Creek.	Spill pallets, oil/water separator
Other Areas				
Complete failure of portable tank (Tank #4)	500	Gradual to instantaneous	SW to Silver Creek.	Secondary shell, oil/water separator
Leaking portable tank or overfills (Tank #4)	1 to 100	3 gal/min	SW to Silver Creek.	Secondary shell, oil/water separator
Leak during transfer to heating fuel UST (Tank # 6)	1 to 120	60 gal/min	SW to Silver Creek.	Oil/water separator
Oil/water separator malfunction	1 to 300	1 gal/min	SW to Silver Creek.	

PART 3: Discharge Prevention – General SPCC Provisions

The following measures are implemented to prevent oil discharges during the handling, use, or transfer of oil products at the facility. Oil-handling employees have received training in the proper implementation of these measures.

FROM US EPA GUIDANCE &/OR REGULATIONS

Passive versus Active Measures of Secondary Containment

In some situations, permanent containment structures, such as dikes, may not be feasible (i.e., for certain electrical equipment). Section 112.7(c) allows for the use of certain types of active containment measures (countermeasures or spill response capability), which prevent a discharge to navigable waters or adjoining shorelines. Active containment measures are those that require deployment or other specific action by the owner or operator. These measures may be deployed either before an activity involving the handling of oil starts, or in reaction to a discharge so long as the active measure is designed to prevent an oil spill from reaching navigable water or adjoining shorelines. Passive measures are permanent installations and do not require deployment or action by the owner/operator.

Secondary containment provisions in 40 CFR part 112.

Type of Facility	*Secondary Containment*	*Rule Section(s)*
All Facilities	*General containment (areas with potential for discharge, e.g., piping, oil-filled operating and manufacturing equipment, and non-rack related transfer areas)*	*112.7(c)*

	Loading/unloading racks	*112.7(h)(1)*
Onshore Storage	*Mobile or portable oil containers**	*112.8(c)(11) or 112.12(c)(11)*
	*Bulk storage containers**	*112.8(c)(2) or 112.12(c)(2)*
Onshore Production	*Bulk storage containers, including tank batteries, separation, and treating facility installations**	*112.9(c)(2)*
Onshore Oil Drilling and Workover	*Mobile drilling or workover equipment*	*112.10(c)*
Offshore Oil Drilling, Production, and Workover	*Oil drilling, production, or workover equipment*	*112.7(c)*

Example methods of secondary containment listed in §112.7(c).

Secondary Containment Method	***Description of Examples***
Dikes, berms, or retaining walls sufficiently impervious to contain oil	*Types of permanent engineered barriers, such as raised earth embankments or concrete containment walls, designed to hold oil. Normally used in areas with potential for large discharges, such as single or multiple aboveground storage tanks and certain piping. Temporary dikes and berms may be constructed after a discharge is discovered as an active containment measure (or a countermeasure) so long as they can be implemented in time to prevent the spilled oil from reaching surface waters. Please see Section 4.2.6, Passive Versus Active Measures of Secondary Containment.*
Curbing	*Typically consists of a permanent reinforced concrete or an asphalt apron surrounded by a concrete curb. Can also be of a uniform, rectangular cross-section or combined with mountable curb sections to allow access to loading/unloading vehicles and materials handling equipment. Can be used where only small spills are expected and also used to direct spills to drains or catchment areas. Temporary curbing may be constructed after a discharge is discovered as an active containment measure (or a countermeasure) so long as it can be implemented in time to prevent the spilled oil from reaching surface waters. Please see Section 4.2.6, Passive Versus*
Culverting, gutters, or other drainage systems	*Types of permanent drainage systems designed to direct spills to remote containment or treatment areas. Ideal for situations where spill containment structures cannot or should not be located immediately adjacent to the potential spill source.*
Weirs	*Dam-like structures with a notch through which oil may flow to be collected. Generally used in combination with skimmers to remove oil from the surface of water.*
Booms	*Form a continuous barrier placed as a precautionary measure to contain/collect oil. Typically used for the containment, exclusion, or deflection of oil floating on water, and is usually associated with an oil spill contingency or facility response plan to address oil spills that have reached surface waters. Beach booms are designed to work in shallow or tidal areas. Sorbent-filled booms can be used for land-based spills. There are very limited applications for use of booms for land-based containment of discharged oil.*
Barriers	*Spill mats, storm drain covers, and dams used to block or prevent the flow of oil. Temporary barriers may be put in place prior to a discharge or after a discharge is discovered. These are both considered effective active containment measures (or countermeasures) as long as they can be implemented in time to prevent the spilled oil from reaching navigable waters and adjoining shorelines. Please see Section 4.2.6, Passive Versus Active Measures of Secondary Containment.*

Spill diversion ponds and retention ponds	*Designed for long-term or permanent containment of storm water capable to capture and hold oil or runoff and prevent it from entering surface water bodies. Temporary spill diversion ponds and retention ponds may be constructed after a discharge is discovered as an active containment measure (or countermeasure) as long as they can be implemented in time to prevent the spilled oil from reaching navigable waters and adjoining shorelines. There are very limited applications for use of temporary spill diversion and retention ponds for land-based containment of discharged oil due to the timely availability of the appropriate excavation equipment required to rapidly construct the ponds. Please see Section 4.2.6, Passive Versus Active Measures of Secondary Containment.*
Sorbent materials	*Insoluble materials or mixtures of materials (packaged in forms such as spill pads, pillows, socks, and mats) used to recover liquids through the mechanisms of absorption, adsorption, or both. Materials include clay, vermiculite, diatomaceous earth, and man-made materials. Used to isolate and contain small drips or leaks until the source of the leak is repaired. Commonly used with material handling equipment, such as valves and pumps. Also used as an active containment measure (or countermeasure) to contain and collect small-volume discharges before they reach waterways. Please see Section 4.2.6, Passive Versus Active Measures of Secondary Containment.*
Drip pans	*Used to isolate and contain small drips or leaks until the source of the leak is repaired. Drip pans are commonly used with product dispensing containers (usually drums), uncoupling of hoses during bulk transfer operations, and for pumps, valves, and fittings.*
Sumps and collection systems	*A permanent pit or reservoir and the troughs/trenches connected to it that collect oil.*

Compliance with Applicable Requirements (40 CFR 112.7(a) (2) (3) (4) & (5))

FROM US EPA GUIDANCE &/OR REGULATIONS

(40 CFR 112.7(a) (2) (3) (4) & (5))(2) Comply with all applicable requirements listed in this part. 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), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), 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 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), 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).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried 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. You must also address in your Plan:

(i) The type of oil in each container and its storage capacity;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

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

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

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) 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).
(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.
(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.

Regulation 40 CFR part-112.7 (c) & (h) generally requires the following secondary containment systems or their equivalents for Bulk Tanks, Loading & Unloading Racks and Piping Systems: Dikes, berms, retaining walls, curbing, culverting, gutters, weirs, booms, spill diversion ponds, impounding basins, or sumps, and sorbents to be sufficiently impervious.

From US EPA Ombudsman memorandum of August 14, 2002, regarding Sufficiently Impervious.

"Dikes, berms, or retaining walls must be sufficiently impervious to contain oil. The purpose of secondary containment is to contain oil from escaping the facility and reaching the environment. An owner or operator of a facility should have flexibility in how he prevents a discharge as described in §112.1(b) and any method of containment which achieves that end is sufficient. Similarly, because the purpose of the "sufficiently impervious" standard is to prevent discharges as described in §112.1(b), dikes, berms, or retaining walls must be capable of containing oil and preventing such discharges. Discharges as described in §112.1(b) may result from direct discharges from containers, or from discharges from containers to groundwater that travel through the groundwater to navigable waters. Effective containment means that the dike, berm, or retaining wall must be capable of containing oil and sufficiently impervious to prevent discharges from the containment system until it is cleaned up. The same holds true for containment floors or bottoms; they must be able to contain oil to prevent a discharge as described in §112.1(b). However, "effective containment" does not mean that liners are required for secondary containment areas. Liners are an option for meeting the secondary containment requirements, but are not required by the rule." (end)

Use Hydraulic Conductivity readings that are site specific: i.e. 0.01 gallons/day/square foot. The reading indicates that for a 1000 sq. ft. dike it would leak 10 gallons per day or total of 30 gallons in 72 hours. Engineered Compacted Clays, Concrete, Liners/Membranes may meet this requirement.

The US EPA does not interpret §112.7(h) (see page 20) to apply beyond activities and/or equipment associated with tank car and tank truck loading/unloading racks. Therefore, loading and unloading activities that take place beyond the rack area would not be subject to the requirements of 40 CFR §112.7(h) (but, of course, would be subject, where applicable, to the general containment requirements of 112.7(c). US EPA interprets §112.7(h) only to apply to loading and unloading "racks." Under this interpretation, if a facility does not have a loading or unloading "rack," §112.7(h) does not apply. The Agency did not mean to imply that any particular categories of facilities, such as production facilities, are likely to have loading or unloading racks present.

US EPA believes that the proper standard of ''sufficient freeboard'' to contain precipitation is that amount necessary to contain average precipitation from a 25-year, 24-hour storm event.

Also described on the supplemental drawing, the loading racks are used to transfer products to local "account tank vehicles." Such collections (drips and minor spills) will be removed within 24 hours as necessary. The loading racks are protected by steel supports with a weather canopy, with warning signs and fire extinguisher.

Facility Layout Diagram (40 CFR 112.7(a) (3))

A map is provided for in APPENDIX J showing the general location of the facility. The attached plot print presents a layout of the facility and the location of storage tanks and drums. The diagram also shows the location of storm water drain inlets and the direction of surface water runoff. As required

under 40 CFR 112.7(a)(3), the facility diagram indicates the location and content of ASTs, USTs, and transfer stations and connecting piping.

Spill Reporting (40 CFR 112.7(a) (4))

The discharge notification form included in APPENDIX H will be completed upon immediate detection of a discharge and prior to reporting a spill to the proper notification contacts.

Potential Discharge Volumes and Direction of Flow (40 CFR 112.7(b))

Distance to Navigable Waters and Adjoining Shorelines and Flow Paths

This facility is provided with spill collection and containment facilities that are intended to prevent spillage from reaching and entering navigable water. Therefore, the predictions described as follows are based upon the failure of normal storage or piping facilities and the additional failure of collection and containment facilities to prevent spillage from escaping the facilities. The following predictions include direction, rate of flow, and total quantity of oil that could be discharged as a result of each major type of failure.

Direction, route, including type of terrain, flow velocity of spills, intersected roads and culverts, name of stream or body or water, distance to water.

Spillage at the loading racks should be minimal because this involves manually controlled, self-closing valves for transferring petroleum products into the available space of tankwagon vehicle compartments through open domes. The loading rack is installed on a concrete pad. All efforts will be made to minimize any drippage from withdrawals of fill spouts. All liquids accumulated will be removed at the loading rack on a daily basis. Spillage at the loading racks would be minimal due to the fully attended aspect of loading and unloading product.

The tanks are supplied by deliveries using highway transport tankers. Unloading operations using centrifugal transfer pumps require the driver-attendant to stand by and monitor the operations. If a hose ruptures, or any other component causes a spill, fast-acting compartmental valves will be closed. The transport, while unloading, is parked on a concrete pad.

The surface flow velocity is estimated to be 1/2 foot per second. If any spillage escapes the secondary containment systems, or from any loading/unloading operations, it could flow to the north impacting drainage ditching, catch basins and culverts. From there, spillage would discharge into Loves Creek, approximately 700 feet to the north. If spilled petroleum leaves the property, then Chatham County Emergency Management Agency shall be notified (see page 2). Every effort will be made to stop or control spillage before it leaves the property or enters storm drainage pipes by use of hay bales, absorbents, drain plugs or other approved means.

Discharge History (see Table 4)

Spills less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and is discharged more than 100 feet from all surface water bodies does not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense. SEE APPENDIX'S D, G & H

Whenever this facility has discharged more than 1,000 gallons of oil in a single discharge or discharged more than 42 gallons of oil in each of two discharges occurring within any 12-month period. Table 4 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the facility where oil is stored, used, or handled.

Table 4 summarizes the facility's discharge history. (As of Current Date of SPCC Plan)

Table 4 -Oil Discharge History (within 12 months)

Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
On 3/23/2003, a leaking valve on a delivery truck discharged 50 gallons of diesel oil onto the ground during a rain event, allowing approximately 10 gallons to enter Silver Creek.	A boom was placed into Silver Creek immediately upon discovery. Approximately 35 gallons of oil were recovered from Silver creek and the facility ground.	An oil/water separator was installed and the facility drainage was designed to flow into the separator.

Practicability of Secondary Containment (40 CFR 112.7(d))

FROM US EPA GUIDANCE &/OR REGULATIONS

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 man-power, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

This facilities management has determined that secondary containment is practicable at this facility. (See page 26 & APPENDIX K if required)

Containment and Diversionary Structures (40 CFR 112.7(c))

FROM US EPA GUIDANCE &/OR REGULATIONS

Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b). 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. 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;

(iii) Culverting, gutters, or other drainage systems;

(iv) Weirs, booms, or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds; or

(vii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

Methods of secondary containment at regulated facilities may include a combination of structures (e.g., dikes, berms, built-in secondary containment, remote impounding), quick catchment drainage systems (e.g., oil/water separators, curbed concrete pads), and/or land-based spill response (e.g., drain covers, sorbents) to prevent oil from reaching navigable waters and adjoining shorelines:

This facility is equipped as follows: As described on the supplemental drawing, dike is constructed of concrete block walls with concrete floor. The dike dimensions are approximately 73ft. x 30.5ft. x 2.5ft. The net containment volume or aggregate capacities of the dike area provides sufficient storage capacity for the largest bulk storage container within the diked area, tank displacement, and precipitation. The loading/unloading secondary containment curbed concrete pad is piped to an oil/water separator, which should have been design to hold 3,000 gallons. The transport unloading and loading rack areas are on a concrete pad. All loading rack pumps are mounted on concrete/steel pads. Product piping is aboveground to the pumps, tanks, and bulk loading racks. All spills must be stopped before leaving the property with adequate planning and containment measures. In the event of a spill, all storm drainage ditches/drains/catch basins must be sealed by any reasonable means to prevent petroleum from leaving the property.

When feasible, the secondary containment system floor and walls must be sealed to prevent seepage and any spilled petroleum product from entering the ground for a minimum of 72 hours. Spill containment drain valve systems shall be normally closed and only operated to discharge clear (no oily sheen) rainwater. Precipitation accumulation from the secondary containment systems will be removed by manually controlled gate valve's, which shall be normally closed.

The flow path of spillage from aboveground storage facilities or transfer facilities traverses a unpaved gravel yard that retards surface flow. Generally, the loading rack pad and transport unloading

connection areas are curbed and sloped causing any surface spill to flow to a single point to allow for emergency

As described on the supplemental drawing, secondary containment systems exist for the aboveground storage tanks. Loading rack areas and transport unloading areas also have secondary containment via an oil/water separator. Petroleum Transfer Pumps are installed within the secondary containment area. This facility uses an oil/water separator as part of its drainage system to contain oil discharged in certain areas of the facility.

Inspections, Tests, and Records (40 CFR 112.7(e))

FROM US EPA GUIDANCE &/OR REGULATIONS

Inspections, tests, and records. 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.

112.8 (c) (6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs.

The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). "Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs…. Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive 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.

The environmental equivalence provision, contained in §112.7(a) (2), allows for deviations from specific requirements of the SPCC rule, as long as the alternative measures provide equivalent environmental protection. The environmental equivalence provision is a key mechanism of the performance-based SPCC rule. This flexibility enables facilities to achieve environmental protection in a manner that fits their unique circumstances. It also allows facilities to adopt more protective industry practices and technologies as they become available.

Deviations are not allowed for secondary containment requirements and the general recordkeeping and training provisions. Additionally, deviations are not allowed for the administrative provisions of the rule, §§112.1 through 112.5.

FROM US EPA GUIDANCE &/OR REGULATIONS

Requirements eligible for environmental equivalence, by facility type.

Facility Type/Provision	*Section(s)*	
	Petroleum Oils and Non-Petroleum Oils	*Animal Fats and Vegetable Oils*
All regulated facilities		
Security	*112.7(g)*	
Loading and unloading racks	*112.7(h)(2) and 112.7(h)(3)*	
Brittle fracture evaluation	*112.7(i)*	
Onshore facilities		
Facility drainage/undiked areas	*112.8(b), 112.9(b), 112.10(b) and 112.11(b)*	*112.12(b)*
Type of bulk storage container	*112.8(c)(1) and 112.9(c)(1)*	*112.12(c)(1)*
Drainage of diked areas	*112.8(c)(3)*	*112.12(c)(3)*

Corrosion protection of buried storage tanks	*112.8(c)(4) and 112.8(c)(5)*	*112.12(c)(4) and 112.12(c)(5)*
Integrity testing and/or container inspection	*112.8(c)(6) and 112.9(c)(3)*	*112.12(c)(6)*
Monitoring internal heating coils	*112.8(c)(7)*	*112.12(c)(7)*
Engineering of bulk container installation (overfill prevention)	*112.8(c)(8) and 112.9(c)(4)*	*112.12(c)(8)*
Monitoring treatment/disposal facilities	*112.8(c)(9) and 112.9(d)(2)*	*112.12(c)(9)*
Removal of oil in diked areas and production facility drainage	*112.8(c)(10)*	*112.12(c)(10)*
Piping	*112.8(d), 112.9(d)(1), and 112.9(d)(3)*	*112.12(d)*
Oil drilling and workover facilities		
Facility drainage/undiked areas (rig position)	*112.10(b)*	*N/A*
Blowout prevention and well control system	*112.10(d)*	*N/A*
Offshore facilities		
Offshore oil drilling and workover facilities	*112.11(b) through 112.11(p)*	*N/A*

The engineer may use the equivalent environmental protection requirements (see notes Appendix B) allowed by *US EPA 40 CFR §112.7(a) (2)* *Comply with all applicable requirements listed in this part.* ***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), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), 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 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),* ***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).*

See: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors Specifically Guidance Chapters 3 & 7

Bulk Storage Tanks – 40 CFR 112.8(c)(6)

As required by the SPCC rule, this facility performs the inspections, tests, and evaluations listed in the following table. Table 5 summarizes the various types of inspections and tests performed at the facility. The inspections and tests are described later in this section, and in the respective sections that describe different parts of the facility (e.g., APPENDIX B for bulk storage containers and facility equipment).

PE has established baseline conditions by using the UL tank construction manual. Hydrocarbon corrosion rates are typically 2 mils per year. Baseline conditions established by known construction standards and typical corrosion rates. Site specific conditions will determine tank baseline condition requirements:

Maintenance & Water removal records on file:	**X**	**YES**		**NO**
Interim I&M for proper maintenance to be implemented	**X**	**YES**		**NO**
Integrity Test for baseline conditions		**YES**	**X**	**NO**

Table 5: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
Aboveground tank/container	Test tank/container integrity or provide equivalent environmental protection. Combine visual inspection or another testing technique (non-destructive shell testing). Inspect outside of container for signs of deterioration and discharges.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Container supports and foundation	Inspect container's supports and foundations.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Liquid level sensing devices (overfill)	Test for proper operation.	Annual
Diked area	Inspect for signs of deterioration, discharges, or accumulation of oil inside diked areas. Visually inspect content for presence of oil.	Monthly Prior to draining
Lowermost drain and all outlets of tank truck	Visually inspect.	Prior to filling and departure
Effluent treatment facilities	Detect possible system upsets that could cause a discharge.	Daily, monthly
All aboveground valves, piping, and appurtenances	Assess general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.	Monthly
Buried metallic storage tank	Leak test.	Annually
Buried piping	Inspect for deterioration. Integrity and leak testing.	Whenever a section of buried line is exposed for any reason. At the time of installation, modification, construction, relocation, or replacement.

Daily Inspection

A facility employee performs a complete walk-through of the facility each day. This daily visual inspection involves: (1) looking for tank/piping damage or leakage, stained or discolored soils, or excessive accumulation of water in diked and bermed areas; (2) observing the effluent from the oil/water separator; and (3) verifying that the dike drain valve is securely closed.

Monthly Inspection

The checklist provided in APPENDIX B is used for monthly inspections by facilities personnel. The monthly inspections cover the following key elements:

- **Observing the exterior of aboveground storage tanks, pipes, and other equipment for signs of deterioration, leaks, corrosion, and thinning.**
- **Observing the exterior of portable containers for signs of deterioration or leaks.**
- **Observing tank foundations and supports for signs of instability or excessive settlement.**
- **Observing the tank fill and discharge pipes for signs of poor connection that could cause a discharge, and tank vent for obstructions and proper operation.**
- **Verifying the proper functioning of overfill prevention systems.**

- **Checking the inventory of discharge response equipment and restocking as needed.**
- **Observing the effluent and measuring the quantity of accumulated oil within the oil/water separator.**

All problems regarding tanks, piping, containment, or response equipment must immediately be reported to the Facility Manager. Visible oil leaks from tank walls, piping, or other components must be repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Pooled oil is removed immediately upon discovery.

Written monthly inspection records are signed by the Facility Manager and maintained with this SPCC Plan for a period of three years.

Annual Inspection

Facility personnel perform a more thorough inspection of facility equipment on an annual basis. This annual inspection complements the monthly inspection described above and is performed in June of each year using the checklist provided in APPENDIX B of this Plan.

The annual inspection is preferably performed after a large storm event in order to verify the imperviousness and/or proper functioning of drainage control systems such as the dike, rollover berm, control valves, and the oil/water separator.

Written annual inspection records are signed by the Facility Manager and maintained with this SPCC Plan for life of the tanks.

Periodic Integrity Testing

In addition to the above monthly and annual inspections by facility personnel, certification of tank integrity testing may be required (if equivalent environmental protection not provided). Tanks as noted in APPENDIX B are periodically evaluated by an outside certified tank inspector(s) following the Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks, SP-001, (latest version), and or API 653 as described on page 17 & APPENDIX B notes of this Plan.

PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES
(Ref. 112.7 (f))

FROM US EPA GUIDANCE &/OR REGULATIONS

(Ref. 112.7 (f)) (f) Personnel, training, and discharge prevention procedures.

(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.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(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.

Facilities Designated Person For Oil Spill Prevention:
NAME: Opie Taylor

Training Scope and Frequency

At least annually all personnel are given training in oil spill prevention, including operation and maintenance of equipment. They are given thorough reviews of all parts of this SPCC Plan, both for routine operations and for emergency situations. Where specific responsibilities are assigned, these requirements will be reviewed. All such training occasions will be documented with an employee roster that is signed by each employee. This document will be kept in the master binder or file of the SPCC

Plan. See APPENDIX D "Record of Annual Discharge Prevention Briefings and Training." A copy of the Plan will be on display, accessible to all employees at all times.
New employees will be given as much spill prevention training as is commensurate with his new status and ability to be effective. This training will be provided within one week of his employment. Training for all employees will include references and analysis of any past spills and the experience resulting there from.

The Person-in-Charge of Oil Prevention (generally, the same for supervising oil spill reactions and counter- measures) will designate specific personnel to (1) make contacts and report spills in a spill incident, (2) undertake control of spillage, assure containment, retrieve spillage, (3) restore property and remediate contaminated property except where an outside cleanup contractor may perform this function. The designated spill response employees, with the Person-in-Charge in command, will undertake a rehearsal of a spill incident. The rehearsal will include an investigation of the potential flow route of spillage with special attention given to strategic points to achieve barricading, sealing, and containment: curbs, drains, culverts, open ditches.

The Person-in-Charge will utilize the "Contact List and Telephone Numbers" page 2 in developing a training session for oil-spill response.

SECURITY
(Ref. 112.7 (g))

FROM US EPA GUIDANCE &/OR REGULATIONS

(Ref. 112.7 (g)) (g) Security (excluding oil production facilities). (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

(3) Lock the starter control on each oil pump in the ''off'' position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.

(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:

(i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non operating personnel (the general public, local police, etc.); and

(ii) Prevention of discharges occur-ring through acts of vandalism.

Fencing

FROM US EPA GUIDANCE &/OR REGULATIONS

Security Requirement Amendment 49 CFR 112.7(g) - The final rule amends existing SPCC security requirements for bulk plants to allow more flexibility. The final rule allows an owner or operator of a bulk plant to tailor security measures to specific characteristics and location of the bulk plant facility. The final rule eliminates onerous security requirements such as facility fencing, 24-hour monitoring and other security measures to prevent a release due to vandalism. Moreover, the rule does not require that a professional engineer approve the selected security measures. Instead, a facility owner or operator may select SPCC security requirements by including in the SPCC plan a description of the security methods used to accomplish each of the following:

1. Secure and control access to all oil handling, process and storage areas,
2. Secure master flow and drain valves,
3. Prevent unauthorized access to starter controls and oil pumps,
4. Secure out-of-service and loading/unloading connections of oil pipelines, and
5. Address the appropriateness of security lighting to prevent acts of vandalism and assist in the discovery of oil discharges.

The EPA is relying on the reasonable discretion of facility owners and operators to select effective security measures. While fencing and lighting are not required per se, these measures may be needed to secure bulk plants from vandals unless equally effective security measures are taken. In the

event the EPA determines that selected security measures are ineffective, the facility will be found out of compliance with SPCC requirements.

Currently no security fencing is installed. The owner plans on security fencing installation by July 1, 2012.

Valves

The master flow valve on each tank is closed and locked in position during non-operating and unattended hours, and/or the dispenser electrical power is shut off.

Pumps

The electrical power to the transfer pumps shall pass through at least one switch in the "off" position and accessible only to authorized personnel during non-operating and unattended hours.

Piping

Piping connections not in service or out of service for six months or more shall be capped or blank-flanged. All piping connections in service shall be color-coded or equipped with product identification signs.

Lighting

This facility is equipped with area lights at the loading rack and as shown on the drawing.

LOADING AND UNLOADING FACILITIES
(Ref. 112.7 (h) & 112.8 (d))

FROM US EPA GUIDANCE &/OR REGULATIONS

(Ref. 112.7 (h) & 112.8 (d)) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).
(1) Where loading/un-loading area 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 areas. 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 loading/un-loading areas 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.
112.8 (d) Facility transfer operations, pumping, and facility process.
(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.
(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.
(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.
(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.
(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Exclusion from Loading Rack Provision Removed in 2009

The 2008 amendments specifically excluded onshore oil production facilities and farms from the loading/unloading rack requirements at §112.7(h), because racks are not typically associated with these types of facilities. This exclusion was removed in the 2009 amendments. No basis to specifically exclude loading/unloading racks from the requirements at §112.7(h) simply because they are not typically associated at a facility within a specific industry sector. The new definition for loading/unloading rack clarifies the type of equipment that is subject to the requirements at §112.7(h), eliminating uncertainty For facilities (including farms and oil production facilities) that do not have a loading/unloading rack, the provisions at §112.7(h) do not apply; therefore, a specific exclusion is unnecessary.

Transportation rules: In addition to the EPA UST and SPCC regulations, the U.S. Department of Transportation has hazardous material regulations related to driver training, emergency preparation, and incident reporting and emergency response. Training regulations, for example, can be found at 49 CFR part 172, and loading and unloading regulations can be found at 49 CFR 177.834 and 49 CFR 177.837.

40 CFR 112.7 (h) Facility tank car and tank truck loading/unloading rack: (1) Where loading/unloading area 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 areas. 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 loading/unloading areas 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.

(A) Loading racks feature standard self-closing valves for each loading arm, and each valve is held open with a rope during the filling of tankwagon compartments through open domes. Compartments not being filled are kept closed. When filling compartments with gasoline, a bonding cable electrically connects the tankwagon compartments with the filling arms and rack.
Before filling a compartment, its available ullage is verified. Inventory control procedures for tracking product throughout are used to reveal any unauthorized withdrawals of product or underground piping leakage.
(B) Unloading-Transport or Tank Wagons:
Tanker transport compartments are emptied into storage tanks through flexible hoses. The attending driver will verify that the tank to be served actually has the reserve capacity to hold the intended delivery. Upon completion of filling a tank (or emptying a compartment) the compartment valve will be closed, the hose disconnected, and the end elevated so that the hose can be completely drained before removal from the tank fill opening or pump intake piping. Immediately before filling a tank, its available storage ullage is determined by gauging or stick readings. During the transfer, the drivers are alert for proper tank venting and transfer hose integrity. During filling each compartment, all other compartment hatches are kept closed.

Table-6: Fuel Transfer Procedures

Stage	Tasks
Prior to loading/ unloading	Visually check all hoses for leaks and wet spots. Verify that sufficient volume (ullage) is available in the storage tank or truck. Lock in the closed position all drainage valves of the secondary containment structure. Secure the tank vehicle with wheel chocks and interlocks. Ensure that the vehicle's parking brakes are set. Verify proper alignment of valves and proper functioning of the pumping system. If filling a tank truck, inspect the lowermost drain and all outlets. Establish adequate bonding/grounding prior to connecting to the fuel transfer point. Turn off cell phone.

During loading/ unloading	**Driver must stay with the vehicle at all times during loading/unloading activities. Periodically inspect all systems, hoses and connections. When loading, keep internal and external valves on the receiving tank open along with the pressure relief valves. When making a connection, shut off the vehicle engine. When transferring Class 3 materials, shut off the vehicle engine unless it is used to operate a pump. Maintain communication with the pumping and receiving stations. Monitor the liquid level in the receiving tank to prevent overflow. Monitor flow meters to determine rate of flow. When topping off the tank, reduce flow rate to prevent overflow.**
After loading/ unloading	**Make sure the transfer operation is completed. Close all tank and loading valves before disconnecting. Securely close all vehicle internal, external, and dome cover valves before disconnecting. Secure all hatches. Disconnect grounding/bonding wires. Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan. Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage. Remove wheel chocks and interlocks. Inspect the lowermost drain and all outlets on tank truck prior to departure. If necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit.**

PART 4: Discharge Prevention – SPCC Provisions for Onshore Facilities

FACILITY DRAINAGE (Ref. 112.8 (b))

FROM US EPA GUIDANCE &/OR REGULATIONS

(Ref. 112.8 (b) Facility drainage. (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.

(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 stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(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.

(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.

(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 from Diked Areas

Diking/Berm systems approved under this regulation will accumulate water; such water will not infiltrate or seep away. Therefore, drainage of water accumulation must be restrained for evaluation before release. If water has no perceptible contamination, it may be removed by one of the following methods. The underlined method applies to this facility

1. **External: lockable pipe gate valve.**
2. **Accumulation sump and manually controlled sump pump.**

3. Siphon pump arrangement, manually started.
4. Evaporation

If water has perceptible contamination it will be transferred to a holding tank for subsequent treatment or it will be transferred to the oil-water separator when such facility is installed. Each occasion of water removal from the diked area is recorded on the form, "Precipitation Accumulation in Secondary Containments" found in APPENDIX C.

The unloading transport and the loading rack areas must be kept clean and any small spills must be cleaned up immediately. Any spillage resulting from these areas, which have secondary containment, must be controlled under the provisions of this regulation and NC laws. All on site storm drain catch basins and trench drains must be sealed in the event of a petroleum spill. Contaminated wastewater drainage from the loading rack areas must be pumped into containers for storage and shipped to proper wastewater handling facilities

CONFORMANCE WITH STATE AND LOCAL APPLICABLE REQUIREMENTS (40 CFR 112.7(J))

Spills less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and is discharged more than 100 feet from all surface water bodies does not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense. SEE APPENDIX'S D, G & H

If required, all bulk storage tanks at this facility are registered with the state and local authorities and have current certificates of registration and special use permits required by the local fire code.

If required all USTs at the facility meet all requirements Federal & State UST regulations, including cathodic protection, double-wall construction, and monitoring systems.

If applicable, treated storm water runoff is discharged to nearby ditches/streams as permitted under NPDES permits or State regulations. Under Stormwater management plans, the maximum allowable daily oil/grease concentration is 15 mg/L. Grab samples are taken each quarter, following the monitoring requirements specified in the NPDES permit.

BULK STORAGE TANKS
(Ref. 112.8)

TABLE-7 List of Oil Tanks/Containers (see APPENDIX J)

FROM US EPA GUIDANCE &/OR REGULATIONS

(Ref. 112.8 (c) 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.
(2) Construct all bulk storage container installations 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.
(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
(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.

Tank	Location	Type (Construction Standard)	Capacity (gallons)	Content
#1	Bulk Storage Area	AST vertical (UL142)	20,000	Distillate Fuel
#2	Bulk Storage Area	AST horizontal (UL142)	20,000	Gasoline
#3	Fuel Dispensing Area	UST dual wall (STI P3)	5,000	Gasoline

#4	Outside Office Building	UST dual wall (STI P3)	1,000	Distillate Fuel
#5	Bulk Storage Area	AST vertical (field-erected). Heated during winter months (internal coils)	10,000	Residual Fuel
	Inside Maintenance Building	Steel drums	55	Hydraulic & Lubrication Oils

The tanks are suitable for the product stored and labeled UL-142 or certified by industry standards at the time of installation. Emergency relief venting consists of a manufactured emergency vent to relieve at approximately 2.5 psig. Pressure (or refer to liftable manhole covers, large diameter vents or weak roof to shell weldments if either of these alternatives is used). Each tank must have a lockable valve on its main flow connection.

Overfill prevention systems & alarms must be installed in accordance with industry standards and Fire Codes. Overfill prevention must be inspected/tested at regular intervals (see APPENDIX B). Vent whistles can be used at smaller facilities where vent whistle can be heard during tank filling. Another equivalent method as allowed by EPA: If a facility operator/driver will check containers visual tank gauge prior to the unloading process and allow driver/facility operator to check tank gauge during tank filling process at frequent intervals during tank filling process.

TANK OVERFILL PREVENTION: Under Sections 112.8(c)(8) and 112.12(c)(8): Farm Facility 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. (end)

In order to prevent container overfills consider the following: 1) Training individuals involved in the transfer operations; 2) Communicating facility oil transfer procedures to personnel; 3) Ensuring transfer operations are appropriately monitored; 4) Ensuring tank gages and overfill alarms are operational, calibrated and routinely tested; 5) Verifying that the container has sufficient available capacity; 6) Monitoring the product level throughout the operation; and 7) Providing response equipment that is easily accessible from the transfer location

Overfill prevention systems & alarms must be installed in accordance with industry standards and Fire Codes. Overfill prevention must be inspected/tested at regular intervals (see APPENDIX B). Vent whistles can be used at smaller facilities where vent whistle can be heard during tank filling.

This facilities overfill method will use Item (iv) above: This facility operator will check containers visual tank gauge prior to the unloading process and allow assigned facility operator to check tank gauge during tank filling process at frequent intervals (continuously) during tank filling process (See US EPA Guidance Chapter 3, 3.3.3 Overfill Prevention). The American Petroleum Institute (API) RP 2350 "OVERFILL PROTECTION FOR STORAGE TANKS IN PETROLEUM FACILITIES" provide guidance on Attended Facilities where Overfill Detectors are not installed on Tanks. Written procedures for product receipt, shutdown and diversion shall be developed by this facility with assistance from the transporter. Normal level (normal capacity), safe fill level (tank rated capacity) and overfill level (maximum capacity) shall be established for each tank and entered in the tank gauge chart. A direct means of communication shall be provide between facility operator and tank delivery vessel driver/operator.

The tank configuration is constructed to drain by a secondary containment system as described under "Containment and Drainage Control Structures," page 16. Tanks are manually or taped gauged or electronically gauged, for product level, before delivery of petroleum products.

Visible oil leaks from sources such as tank seams, gaskets, rivets, and bolts and sufficiently large enough to cause oil accumulations, will be removed within 24 hours from the time the accumulation occurs, in accordance with the SPCC Regulations. All leaks must be corrected as soon as possible.

Tank and piping will be visibly inspected. Monthly records will be kept using the form "Inspection, Tests & Records" at APPENDIX B. Integrity testing must be done in accordance with standard engineering practices and industry standards. Field erected petroleum tanks (typically over 50,000 gallons) are required to be integrity tested every ten years or when repairs are made in accordance with API standards 653/650. Total aggregate tank capacity is 86,000 gallons.

FACILITY TRANSFER OPERATIONS
(Ref. 112.7 (h) & 112.8 (d))

FROM US EPA GUIDANCE &/OR REGULATIONS

112.7 (h) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also provide corrosion protection on 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. (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.

112.8(d) Facility transfer operations, pumping, and facility process. (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.

Piping Locations

The product piping is installed from the tank directly into the transfer pumps and is aboveground. Product lines from the transfer pumps to the loading rack areas are aboveground.

Piping Characteristics and Corrosion Protection

All piping is Schedule 40 (Std. Wt.) wrought steel pipe fabricated with malleable iron fittings. Aboveground piping is painted or galvanized for protection against corrosion. All piping must be properly labeled for product stored. Underground steel piping must be ensure that proper corrosion protection is applied.

Any new or replaced underground piping (after 8-16-02) will meet the same standards as UST Regulation 40 CFR Part 280 or NC standards: either a properly coated and cathodically protected steel pipe or UL-approved fiberglass or double wall flex pipe.

Inspections and Testing

All aboveground valves, piping, and attached equipment are subjected to monthly examinations by operating personnel. Such inspections are implemented using the form found under "Inspections, Tests, Records" APPENDIX B of this SPCC Plan.
The underground piping must be tightness tested, using the same standards as UST regulation 40 CFR, part 280, when the underground piping is repaired or modified. Records of the above tests are kept for Ten years.

Piping Protection

Underground piping has been investigated to ensure that it is sufficiently deep or otherwise protected to prevent damage. Where aboveground piping and equipment are exposed to possible

vehicular damage, protective barriers should be erected or concrete curbing or bases have been provided. All aboveground product piping must be properly supported to prevent kinks, bends, and undo stresses on piping and tank connections.

Part 5: Discharge Response

This section describes the response and cleanup procedures in the event of an oil discharge. The uncontrolled discharge of oil to groundwater, surface water, or soil is prohibited by state and possibly federal laws. Immediate action must be taken to control, contain, and recover discharged product.

In general, the following steps are taken:

- **Eliminate potential spark sources;**
- **If possible and safe to do so, identify and shut down source of the discharge to stop the flow;**
- **Contain the discharge with sorbents, berms, fences, trenches, sandbags, or other material;**
- **Contact the Facility Manager or his/her alternate;**
- **Contact regulatory authorities and the response organization; and**
- **Collect and dispose of recovered products according to regulation.**

For the purpose of establishing appropriate response procedures, this SPCC Plan classifies discharges as either "minor" or "major," depending on the volume and characteristics of the material released.

A list of Emergency Contacts is provided on page 2. The list is also posted at prominent locations throughout the facility. A list of discharge response material kept at the facility is included in APPENDIX I.

Response to a Minor Discharge

A "minor" discharge is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor discharges are generally those where:

- **The quantity of product discharged is small (e.g., may involve less than 10 gallons of oil);**
- **Discharged material is easily stopped and controlled at the time of the discharge;**
- **Discharge is localized near the source;**
- **Discharged material is not likely to reach water;**
- **There is little risk to human health or safety; and**
- **There is little risk of fire or explosion.**

Minor discharges can usually be cleaned up by Facility personnel. The following guidelines apply:

- **Immediately notify the Facility Manager.**
- **Under the direction of the Facility Manager, contain the discharge with discharge response materials and equipment. Place discharge debris in properly labeled waste containers.**
- **The Facility Manager will complete the discharge notification form (APPENDIX I) and attach a copy to this SPCC Plan.**
- **If the discharge involves more than 25 gallons of oil, the Facility Manager will call the State/Local Department of Environmental Protection Incident Response Division (See page 2).**

Response to a Major Discharge

A "major" discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as when:

- **The discharge is large enough to spread beyond the immediate discharge area;**
- **The discharged material enters water;**

- **The discharge requires special equipment or training to clean up;**
- **The discharged material poses a hazard to human health or safety; or**
- **There is a danger of fire or explosion.**

In the event of a major discharge, the following guidelines apply:
All workers must immediately evacuate the discharge site via the designated exit routes and move to the designated staging areas at a safe distance from the discharge. Exit routes are included on the facility diagram and posted in the maintenance building, in the office building, and on the outside wall of the outside shed that contains the spill response equipment.
If the Facility Manager is not present at the facility, the senior on-site person notifies the Facility Manager of the discharge and has authority to initiate notification and response. Certain notifications are dependent on the circumstances and type of discharge. For example, if oil reaches a sanitary sewer, the publicly owned treatment works (POTW) should be notified immediately. A discharge that threatens Navigable Waters may require immediate notification to downstream users such as the public drinking water intakes.

- **The Facility Manager (or senior on-site person) must call for medical assistance if workers are injured.**
- **The Facility Manager (or senior on-site person) must notify the Fire Department or Police Department.**
- **The Facility Manager (or senior on-site person) must call the spill response and cleanup contractors listed in the Emergency Contacts list in APPENDIX G & H.**
- **The Facility Manager (or senior on-site person) must immediately contact the State Department of Environmental Protection Incident Response Division (XXX-XXX-XXXX) and the National Response Center (800-424-8802).**
- **The Facility Manager (or senior on-site person) must record the call on the Discharge Notification form in APPENDIX H and attach a copy to this SPCC Plan.**
- **The Facility Manager (or senior on-site person) coordinates cleanup and obtains assistance from a cleanup contractor or other response organization as necessary.**

If the Facility Manager is not available at the time of the discharge, then the next highest person in seniority assumes responsibility for coordinating response activities.

Waste Disposal

Wastes resulting from a minor discharge response will be containerized in impervious bags, drums, or buckets. The facility manager will characterize the waste for proper disposal and ensure that it is removed from the facility by a licensed waste hauler within two weeks.

Wastes resulting from a major discharge response will be removed and disposed of by a cleanup contractor.

Discharge Notification

Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the National Response Center (1-800-424-8802). The Center is staffed 24 hours a day. A summary sheet is included in APPENDIX G & H to facilitate reporting.

MAYBERRY OIL COMPANY
ALTERNATIVE OIL SPILL CONTINGENCY PLAN & DISCHARGE RESPONSE

Ref. 112.7 (d)

FROM US EPA GUIDANCE &/OR REGULATIONS

Under 40 CFR 112.7 (d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs © and (h)(1) of this section, and §§ 112.8©(2), 112.8©(11), 112.9©(2), 112.10©, 112.12©(2), 112.12©(11), 112.13©(2), and 112.14© 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.

EPA believes that it may be appropriate for an owner or operator to consider costs or economic impacts in determining whether he can meet a specific requirement that falls within the general deviation provision of §112.7(a)(2). EPA states that cost can be considered but cannot be the only consideration. EPA believes so because under this section, the owner or operator will still have to utilize good engineering practices and come up with an alternative that provides "equivalent environmental protection." However, EPA believes that the secondary containment requirement in §112.7(d) is an important component in preventing discharges as described in §112.1(b) and is environmentally preferable to a contingency plan prepared under 40 CFR part 109. The owner or operator may only provide a contingency Plan in his SPCC Plan and otherwise comply with §112.7(d). Therefore, the purpose of a determination of impracticability is to examine whether space or other geographic limitations of the facility would accommodate secondary containment; or, if local zoning ordinances or fire prevention standards or safety considerations would not allow secondary containment; or, if installing secondary containment would defeat the overall goal of the regulation to prevent discharges as described in §112.1(b). EPA clarifies their main point that owners must not opt for a contingency plan in place of containment simply because contingency plans are cheaper. Without question, secondary containment is a top priority of the EPA and marketers must demonstrate best efforts in attempting to provide containment where practical

See APPENDIX I & K for Strong Oil Spill Contingency Plan

(A) Reason of Impracticability

The warehouse can store up to 3,000 gallons of hydraulic lubrication oils and currently does not have secondary containment. This facility was built many years before 1973, when environmental and fire codes were nonexistent or profoundly simple. It is this engineer's opinion that secondary containment not be provided for the bulk lube warehouse because the total modification of the site and warehouse is infeasible and there is the remote possibility (low risk) of a significant spill from this area.

(B) Commitment of Spill Response Capability
(Describe sources, locations, commitment arrangements, dedicated equipment and materials, mobility.)

Even though the spill contingency plan is not required, the owner has established the following plan of action. If a major spill occurs, the following steps will be enacted:

1. **Spill source will be stopped if possible.**
2. **Office will be notified concurrent with stoppage effort.**
3. **Local Fire Department will be summoned, if circumstances require their presence.**
4. **Spill will be contained on site if safe and possible.**
5. **Absorbent, sand and dedicated tools are stored on site at the bulk plant.**
6. **State and Federal oil spill notifications will be made (see APPENDIX I).**
7. **Cleanup and restoration measure will be performed.**

NOTE: A written and rehearsed plan of the above steps will include telephone numbers, names, and responsibilities of staff persons. (Contingency plan per APPENDIX K.)

Every effort must be made to contain the spill on the property. The petroleum spill must not leave the property and must not enter storm drains, or tributaries to creeks and streams. If spill reaches open ditching or storm drain catchment basins, then sand, absorbents drain plugs, haybales, or other material must be used to dam the ditch or seal the drains and prevent further downstream migration. If spilled petroleum leaves the property then Chatham County Emergency Management and City/County Fire Department must be notified ASAP (see page 2).

APPENDIX A
ATTACHMENT C-II CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM
FACILITY NAME: __Mayberry Oil Company____
FACILITY ADDRESS: 1960 Fife St., Siler City, NC 27344___

1. Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons and do the operations include over water transfers of oil to or from vessels?
YES_____ NO X_

2. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility without secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground storage tank within the storage area?
YES_____ NO X

3. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance as calculated using the appropriate formula in Attachment C-III or an *alternative formula such that a discharge from the facility could cause injury to fish and wildlife and sensitive environment? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.
YES_____ NO X

4. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula, such that a discharge from the facility would shut down a public drinking water intake?
YES_____ NO X

5. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and within the past 5 years, has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons?
YES_____ NO X

***If an alternative formula is used, documentation of the reliability and analytical soundness of the alternative formula must be attached to this form.**

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 injury of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature: _____ Title: __President_

Name: Aunt Bee Date: _____

APPENDIX B INSPECTIONS, TESTS, RECORDS Ref. 112.8 (c)

FROM US EPA GUIDANCE &/OR REGULATIONS

Per US EPA, an industry standard such as API 653 or STI-001 is not an alternative method of compliance but a recommended method of compliance. There is an important regulatory distinction between the two.

There are two methods of compliance under the rule.

1. You can use a recommended method of compliance (a method included in the rule), OR

2. You can use an alternative method of compliance, (a method not included in the rule).

If you use a recommended method of compliance, you are not required to have the approval of a PE or a justification in your SPCC plan as to why this method is "equally protective of the environment".

If you use an alternative method of compliance, you must have approval of the PE and justification in your SPCC plan that the method is "as equally protective of the environment" as the recommended method of compliance that you are replacing.

The final SPCC rule is recognizing industry standards, such as API 653 & STI-001 are not alternative methods of compliance but a recommended method of compliance. Therefore, you may use API 653 or STI-001 without approval of a PE and without having to prove it is equally protective of the environment.

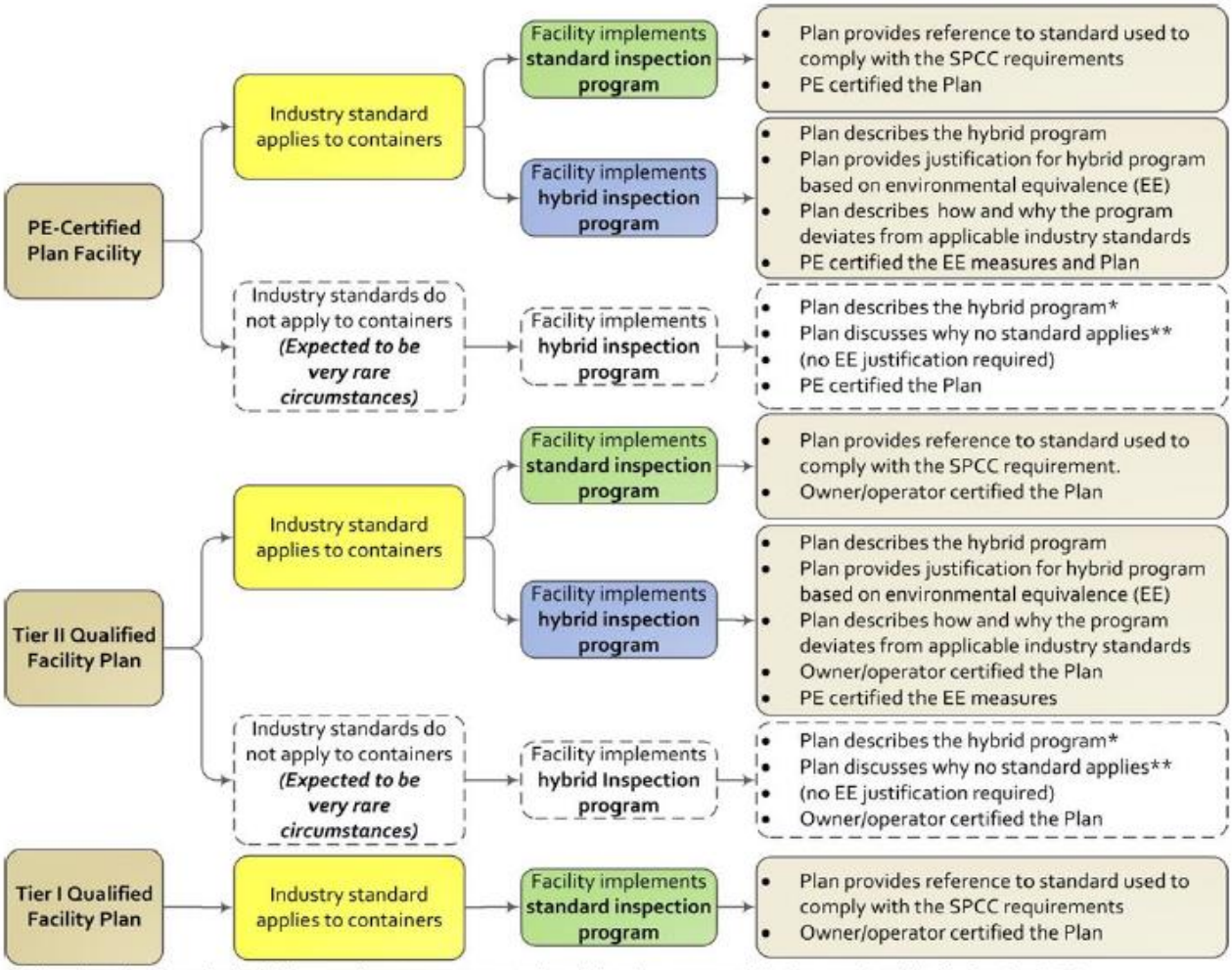
For example, if you want to use STI-001 as your visual testing standard, you may do so without justification by the PE that the STI-001 is equally protective of the environment.

Let's take this example a step further. Under STI-001, you must use a certified inspector to conduct the visual inspection (for most tanks). Maybe you want to conduct the inspection yourself and not use a certified inspector. If so, you can take advantage of the PMAA settlement language (see below) that allows your PE to come up with an alternative method of compliance. This alternative method could simply follow STI-001 in every way except that it would allow you to conduct the visual inspection rather than a certified inspector. This alternative method would be ok to use under the SPCC rule so long as the PE can justify why allowing you to conduct the visual inspection is as equally protective of the environment as requiring a certified inspector to do so.

The bottom line is that you can use STI-001 to comply with the visual integrity inspection requirement under the SPCC rule without involvement of a PE. Or you can use a hybrid STI-001 that your PE comes up with as an alternative method under the PMAA settlement agreement. The only difference is that the alternative method has to pass muster as being equally protective of the environment before it can be used. The US EPA leaves that decision to the PE.

BELOW FIGURE FROM US EPA GUIDANCE-2013

Figure 7-4: Summary of integrity testing and inspection program documentation for bulk storage containers at onshore facilities, by type of SPCC Plan and standard applicability case.



* Plan describes how the hybrid inspection program meets the minimal recommended elements described in Section 7.5.3.

The inspections are for the basic part of the Plan. All owner inspection records are to be kept for a period of 3 years. All Integrity testing documentation should be kept for the life of the facility. Copies of this form should be made for future use. This engineer has used the Steel Tank Institute's STI-SP001 "*Standard for Inspection of Aboveground Storage Tanks*" for testing and inspection standards. For a copy contact STI, 944 Donata Court, Lake Zurich, IL 60047, phone-847/438-8265, www.steeltank.com. This engineer has also used the equivalent environmental protection requirements (see notes) allowed by US EPA 40 CFR §112.7(a) (2). Tanks that meet US EPA Equivalent Environmental Protection will not have integrity testing requirements.

Periodic tank inspections are to be performed by the tank owner or his designate. Qualified tank inspectors are to perform the certified tank testing/inspections. Qualified tank inspectors are those who are certified by API or STI. Field Erected Tanks over 265,000 gallons must comply with inspection and testing intervals specified in API 653, "Tank Inspection, Repair, Alternation, & Reconstruction."

Periodic tank inspections are to be performed by the tank owner or his designate. Qualified tank inspectors are to perform the certified tank testing/inspections. Qualified tank inspectors are those who are certified by industry standards (API or STI) or at the direction of the PE. Field Erected Tanks over 265,000 gallons must comply with inspection and testing intervals specified in API 653, "Tank Inspection, Repair, Alternation, & Reconstruction."

NOTE: Field erected tanks that meet the following criteria may use the STI "Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible & Flammable Liquids" SP001-01 for testing and inspection standards appendix. This would only apply to steel ASTs that are as follows:

- **Welded and flat-bottom**
- **Up to 30 feet in diameter and with a height of less than 50 feet (± 265,000 gallons or less).**
- **Fabricated with full-fusion, butt-welded shells and with lap-welded or butt-welded bottom plates**
- **Fabricated with a shell thickness of each course less than ½ inch and with original nominal bottom thickness plates equal to ¼ inch or 6 mm**
- **Built to a nationally recognized standard.**

FROM US EPA GUIDANCE &/OR REGULATIONS

Summary of SPCC inspection, evaluation, testing, and maintenance program provisions.

Integrity testing is any means to measure the strength (structural soundness) of a container shell, bottom, and/or floor to contain oil, and may include leak testing to determine whether the container will discharge oil. Integrity testing is a necessary component of any good oil discharge prevention plan. It will help to prevent discharges by testing the strength and imperviousness of containers, ensuring they are suitable for continued service under current and anticipated operating conditions (e.g., product, temperature, pressure). Testing may also help facilities determine whether corrosion has reached a point where repairs or replacement of the container is needed, and thus avoid unplanned interruptions in facility operations. (67 FR 47120)

Section 112.8(c)(6) of the SPCC rule specifies the inspection and testing requirements for aboveground bulk storage containers at onshore facilities that store, use, or process petroleum oils and non-petroleum oils (except animal fats and vegetable oils). Section 112.12(c)(6) contains the same requirements for facilities with animal fats and vegetable oils.

***Regularly scheduled integrity testing.** The integrity testing requirements are distinct from, and are in addition to, the requirement to frequently inspect the outside of an aboveground storage container ("visual inspection," see below). The integrity testing requirement applies to large (field constructed or field-erected) and small (shop-built) aboveground containers; aboveground containers on, partially in (partially buried, bunkered, or vaulted tanks), and off the ground wherever located; and to aboveground containers storing any type of oil.*

Generally, visual inspection alone is not sufficient (without equivalent environmental protection) to test the integrity of the container as stated in §§112.8(c) (6) and 112.12(c) (6); it must be combined with another testing technique and must include the container's supports and foundations.

Testing techniques include but are not limited to: Hydrostatic testing; Radiographic testing; Ultrasonic testing; Acoustic emissions testing; and Another system of non-destructive shell testing.

The SPCC rule requires that integrity testing of aboveground bulk storage containers be performed on a regular schedule, as well as when material repairs are made, because such repairs might increase the potential for oil discharges. As stated in the preamble to the final 2002 rule, "Testing on a 'regular schedule' means testing per industry standards or at a frequency sufficient to prevent discharges. Whatever schedule the PE selects must be documented in the Plan" (67 FR 47119). The frequency of integrity tests should reflect the particular conditions of the container, such as the age, service history, original construction specifications, prior inspection results, and

***Frequent visual inspection.** There must be a frequent inspection of the outside of the container for signs of deterioration, discharges, or accumulations of oil inside diked areas (§112.8(c)(6)). This visual inspection is intended to be a routine walk-around. EPA expects that the walk-around, which will occur on an ongoing routine basis, can generally be conducted by properly trained facility personnel, as opposed to the more intensive but less frequent visual inspection component of the non-destructive examination conducted by qualified testing/inspection personnel. Qualifications of these personnel are outlined in tank inspection standards, such as API 653 and STI SP-001. A facility owner or operator can, for example, visually inspect the outside of bulk storage containers on a daily, weekly, and/or monthly basis, and supplement this inspection with integrity testing (see above) performed by a certified inspector, with the scope and frequency determined by industry standards or according to a site-specific inspection program developed by the PE.*

APPENDIX B
HYBRID PROGRAM-INSPECTIONS, TESTS, & RECORDS
Ref. 112.7 (a) (2), 112.7 (e) & 112.8 (c)

FROM US EPA GUIDANCE &/OR REGULATIONS

Although US EPA requires inspection, evaluation, and testing in accordance with industry standards, it does not require that inspections and tests be performed according to a specific standard. Consistent with the environmental equivalence provision in §112.7(a)(2), the PE may use industry standards along with other good engineering practices to develop a customized inspection and testing program for the facility (a "hybrid" inspection program), considering the equipment type and condition, characteristics of products stored and handled at the facility, and other site-specific factors

Consistent with the environmental equivalence provision in §112.7(a)(2), the PE may use industry standards along with other good engineering practices to develop a customized inspection and testing program for the facility considering the equipment type and condition, characteristics of products stored and handled at the facility, and other site-specific factors.

The inspections are for the basic part of the Plan. All owner inspection records are to be kept for a period of 3 years. All Integrity testing documentation should be kept for the life of the facility. Copies of this form should be made for future use. This engineer has used Steel Tank Institutes (STI) Standard for "Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible & Flammable Liquids" SP001 for testing and inspection standards. For a copy contact STI, 570 Oakwood Road, Lake Zurich, IL 60047, phone-847/438-8265, www.steeltank.com**. This engineer has also used the equivalent environmental protection requirements (see notes) allowed by US EPA 40 CFR §112.7(a) (2). Tanks that meet US EPA Equivalent Environmental Protection will not have integrity testing requirements (see notes). Periodic tank inspections are to be performed by the tank owner or his designate.** Certified **tank inspectors are to perform** c**ertified tank testing/inspections** per **API** & **STI** industry standards**.**

EQUIVALENT ENVIRONMENTAL PROTECTION for TANK INTEGRITY TESTING:

FROM US EPA GUIDANCE &/OR REGULATIONS

§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 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), 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). (End of regulatory language)

The following is a partial list of items to consider regarding the elements of a hybrid inspection program. (Owners trained/qualified representative shall review monthly unless otherwise noted) **For shop-built tanks:**

- **Visually inspect exterior of tank; Evaluate external pitting;**
- **Evaluate hoop stress and longitudinal stress risks where corrosion of the shell is present;**
- **Evaluate condition and operation of appurtenances; Evaluate welds;**
- **Establish corrosion rates and determine the inspection interval and suitability for continued service;**
- **Evaluate tank bottom where it is in contact with ground and no cathodic protection is provided;**
- **Evaluate the structural integrity of the foundation;**
- **Evaluate anchor bolts in areas where required; and**
- **Evaluate the tank to determine whether it is hydraulically sound and not leaking.**

APPENDIX B
Shop Fabricated Tanks Only

STI Category I Tanks: _ALL_ : STI Category II Tanks:__NA_ : STI Category III Tanks__NA__
(All inspections monthly except as noted, inspector initials required in monthly boxes.) YEAR-20

Tank Number ALL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
*Storage Tank(s) No. ALL Meet US EPA Equivalent Environmental Protection per Table Notes												
Tank Leakage (visual) Drip Marks, Discoloration of tanks; Puddles containing spilled or leaked material; Corrosion; (EXTERNAL & INTERNAL) Cracks; and Localized dead vegetation.												
Tank Painting/Coating												
Tank Interstitial Space Test (visual monthly if applicable)												
Inspect & Clean PV Vents & Emergency Vents. (Quarterly)												
Check for Water in Tanks (annual)												
**Tank Exterior Testing for Tanks in Contact with Ground per STI SP001												
**Tank Interior Testing for Tanks in Contact with Ground per STI SP001												
Verify all Overfill/Leak Detection Systems Working Properly-Yearly.												
Manhole Covers & Gaskets (Visual)												
Tank Synthetic Liner/Barrier with continuous leak detection. Visible Signs of Leakage around the Tank, Concrete Pad/Liner, Containment, Ringwall or Ground												
Tank Foundations & Supports Evidence of Tank Settlement or Foundation Washout; Cracks; Discoloration; Puddles containing spilled or leaked material; Settling; Gaps between tank and Foundation; and Damage caused by vegetation roots.												
Tank grounding lines in good condition?												
Cathodic Protection Systems (As Required)												
P/V Vents, Open & Operative												
Deformation in Vicinity of Piping Connection at Tank												
Tank Insulation Water Tight												
Tanks Below 1,320 Gallons Daily visual inspection only-												

55 gallon drums (visual inspection only)												
Lowermost Drain and all Outlets of Tank Truck: Visually Inspect Prior to Filling and Departure												
Gaskets Emergency Vents (Yearly)												
DISPENSERS & PIPING												

APPENDIX B
Shop Fabricated Tanks Only
STI Category I Tanks: _ALL_: STI Category II Tanks:__NA_: STI Category III Tanks__NA__
(All inspections monthly except as noted, inspector initials required in monthly boxes.) YEAR-20

TANK NUMBER #	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Piping, Aboveground; Droplets of stored material; Discoloration; Corrosion; Bowing of pipe between supports; Evidence of stored material seepage from valves or seals; and Localized dead vegetation.												
Cathodic Protection Systems (As Required)												
Hydrostatic Relief Valves												
Valves, Gate Check, Strainers												
****Piping, Valves, Integrity & Leak Testing when repairs/modifications done**												
Buried Piping: Inspect for Deterioration Whenever a section of buried piping is exposed for any reason												
Unloading Hoses, Dry-Rotting												
Unloading Couplings, Unions												
Pumps, Lubrication, Supports												
Water Test Valves												
Is electrical wiring for control boxes/lights/pumps in good condition												
SECONDARY CONTAINMENT												
Sufficiently Impervious Concrete **Dike or Remote Impounding-State of Repair, as Applicable**												
Pads for Loading & Unloading with secondary containment												
Effluent treatment Oil-Water Separator & Piping												
Site Drainage, Check for settlement into the base of the tank that would direct rain water under the tank rather than away from it.												
Area free or Weeds, Trash, other Materials												
Check Operation of Secondary Containment Drain Valves												
Site Drainage (Yearly)												

A trained/experienced/qualified employee will perform a complete walk-through of the facility each day. This daily visual inspection involves: (1) looking for tank/piping damage or leakage, stained or discolored soils, or excessive accumulation of water in diked and bermed areas; (2) if applicable observing the effluent from the oil/water separator; and (3) verifying that all secondary containment drain valves are securely closed.

The regulation §112.8 (c) (6) States: "*Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs….Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive 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 bermed areas."*

APPENDIX B
Shop Fabricated Tanks Only
NOTES TO APPENDIX B

FROM US EPA GUIDANCE &/OR REGULATIONS

In the SPCC context, equivalent environmental protection means an equal level of protection of navigable waters and adjoining shorelines from oil pollution. This level of protection can be achieved in various ways, but a facility may not rely solely on measures that are required by other sections of the rule (e.g., implementing secondary containment) to provide environmentally equivalent protection. While environmental equivalence need not be a mathematical equivalence, it must achieve the same desired outcome, though not necessarily through the same mode of operation.

Any hybrid inspection program should include an evaluation of the principal elements that would cause a tank to fail, and how the inspection program addresses finding such conditions, or prevents such conditions from continuing to the point of failure. For example, internal and external corrosion conditions must be considered, and a testing method developed to assure that the condition is identified and measured. Conditions that may lead to a structural failure, for example a failing foundation should be identified and evaluation methods developed to identify the condition. In all cases, careful consideration should be given to discovering such conditions that may not be identifiable from visual examination, such as the bottom of floor plates. Hybrid programs should also include evaluation of container modifications made since last examination that may degrade integrity or lead to failure.

****You must also conduct integrity and leak testing when a whenever a container/tank undergoes material repairs and buried piping at the time of installation, modification, construction, relocation, or replacement. However, US EPA does not require pressure testing or any other specific method. US EPA agrees that, subject to good engineering practice, pressure testing every three or four years may be warranted in addition to regular inspection of aboveground valves, piping, and appurtenances.**

***Mayberry Bulk Plant Facility, is deviating from the integrity testing provision of §112.8(c)(6) for all petroleum storage tanks based on good engineering practice after considering the tank(s) installation and alternative measures, the requirements of Steel Tank Institute (STI) Standard SP-001, and alternative measures implemented by the facility (sufficiently impervious concrete dike). With the construction of new concrete dike, all tanks under 30,000 gallons will be operated in a way that good engineering practice generally accepts an approach that combines visual inspection with placement of a barrier between the container and the ground, designed and operated in a way that ensures that any leaks are immediately detected, to be considered "equivalent" to integrity testing. None of the tanks are insulated and all tanks are on elevated supports. All tanks are located over a sufficiently impervious concrete floor, which functions as a release prevention barrier and has properly sized containment in accordance with §112.8(c) (2). Tanks and piping are in good condition at this time.**

This engineer using good engineering judgment and practice believes that this facility tanks visually inspected monthly is environmentally equivalent to formal external inspections every 20 years per STI-001 Risk Matrix Table. Furthermore, this engineer has considered the degree of risk of a discharge to navigable waters, adjoining shorelines and spill history. The tanks are not located near saltwater, or other accelerated corrosion rate environments. Any tank failures would be contained by sufficiently impervious secondary containment systems and there are numerous opportunities to contain spills before reaching navigable waters. The frequency of inspections is based on the changing conditions of the tanks (e.g., corrosion rates, settling); the interval between inspections may therefore vary over the lifetime of the container.

Under SP-001, the tanks are considered Category 1 tanks (aboveground storage tank with spill control and with continuous release detection method) and therefore require periodic visual inspection of the tank. The owner/operator personnel performing these inspections are knowledgeable of storage facility operations, characteristics of the liquid stored, the type of aboveground storage tanks and its associated components. Owner/operator personnel perform monthly and annual inspections, as described on pages 17-18 and APPENDIX B of this Plan and in accordance with the provisions and the checklists presented in SP001

APPENDIX B
Shop Fabricated Tanks Only

The scope of inspections and procedures is covered in the training provided to employees involved in handling oil at the facility. The routine inspections focus specifically on detecting any change in conditions or signs of product leakage from the tank, piping system, and appurtenances.

In accordance with inspection procedures outlined in this Plan, if signs of leakage or deterioration from the tank(s) and/or piping systems are observed by owner/operator personnel, the tank and/or piping systems is to be inspected by a tank inspector certified by the American Petroleum Institute or Steel Tank Institute to assess its suitability for continued service, according to STI or API Industry Standards.

Owner/operator personnel who conduct inspections are qualified through training, education and/or experience. The tank's physical configuration, combined with monthly and annual inspections, ensures that any small leak that could develop in the tank shell will be detected before it can become significant, escape sufficiently impervious secondary containment, and reach navigable waters. It is generally accepted through good engineering practice, an approach that combines visual inspection with placement of a barrier between the container and the ground, designed and operated in a way that ensures that any leaks are immediately detected, to be considered "equivalent."

An environmentally equivalent approach to following the applicable industry standard verbatim may be a hybrid inspection program that is based on elements designed to minimize the risk of container failure and allow detection of leaks before they impact navigable waters or adjoining shorelines. These elements may be based on a combination of various industry standards and good engineering practice and should include the recommended minimal elements described on page XX for a PE-developed site-specific integrity testing program (or hybrid inspection program). Alternative measures may, for example, prevent container failure by minimizing the container's exposure to conditions that promote corrosion (e.g., direct contact with soil), or they may enable facility personnel to detect leaks and other container integrity problems early so these problems can be addressed before more severe integrity failure occurs.

The ability to use an environmentally equivalent alternative to integrity testing in accordance with an applicable industry standard may be influenced by the tank configuration and adequacy of secondary containment. The facility owner/operator may determine that alternatives to inspection frequency and type of testing and inspections may be more appropriate according to site-specific conditions.

The inspection program can deviate from a portion of a standard when another approach would be more appropriate or cost effective, based on site-specific factors. The SPCC Plan must document the environmentally equivalent alternative, the reason for deviating from the rule requirement, and describe the alternative method in detail, including how it is environmentally equivalent. The PE shall document in the Plan what industry standard applies, how the hybrid inspection program deviates from the applicable industry standard, and how the inspection program meets the minimal recommended elements described on page XX

Tank baseline requirements when a hybrid tank inspection testing program only requires visual inspections may be omitted if the PE deems that baseline in not needed. The standard establishes a frequency for visual inspections rather than basing the interval on the container's corrosion rate. On the other hand, a baseline is necessary for most non-destructive testing protocols, because the container's corrosion rate impacts the frequency/interval of future formal integrity testing inspections.

APPENDIX B
Shop Fabricated Tanks Only

Owners and operators need to refer to the particular industry standard identified in the SPCC Plan to determine the scope of inspection and testing requirements. For example under the STI SP001 standard, visual inspection is allowed for Category I tanks under 5,000 gallons, portable containers such as drums and totes. A baseline determination of metal thickness of a portable container is not required prior to implementing the visual-only integrity testing inspection protocol.

For the Purpose of this SPCC Plan, Good Engineering Practices is defined as: Established engineering methods and standards that are applied throughout the petroleum equipment systems lifecycle. A combination of standards, specifications, codes, regulatory and industrial guidelines as well as accepted engineering (risk of spills impacting navigable waters) and design methods intended to design, construct, operate, and maintain US EPA regulated petroleum storage facilities taking into account not only regulatory compliance but also safety, environmental protection and operability.

FROM US EPA GUIDANCE &/OR REGULATIONS
From US EPA: Bulk Storage Container Inspection Fact Sheet, August 2013.
https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors

The SPCC Guidance for Regional Inspectors published in 2005 described an example that may be environmentally equivalent to the integrity testing requirements of the SPCC rule at that time. The example indicated that visual inspection plus certain additional actions to ensure the containment and detection of leaks may be appropriate for bulk oil storage containers with a capacity up to 30,000 gallons.

This example was based on a policy that described the environmental equivalence flexibility available to a PE with respect to integrity testing in a letter to the Petroleum Marketers Association of America (PMAA). This example was established at a time when the rule specifically required that integrity testing include more than just a visual inspection. While the approach for the use of environmental equivalence described in this letter is still valid, EPA revised the integrity testing provision in 2008 to allow inspection requirements outlined in industry standards to be used without the need for environmental equivalence determinations certified by a PE.

FOR ENGINEERS ADOPTING THE INSPECTION PROGRAM FROM THE STEEL TANK INSTITUTE WITHOUT THE NEED TO PROVE EQUIVALENT ENVIRONMENTAL PROTECTION (equally protective of the environment.)

1. **In SP001, paragraph 6.1 states, "Checklists for periodic AST inspections are found in Appendix C of this standard. These are to be used as a guide for recording inspection data." PEs may tailor the exact Checklists shown in the STI Standard which can be modified to suit an individual tank or location.**

PAGES 57 through 66 ARE COPIED FROM THE FOLLOWING:
STI LOGO COPYRIGHTED WITH PERMISSION

Steel Tank Institute®

STANDARD FOR THE INSPECTION
OF ABOVEGROUND STORAGE TANKS 4th ed. July 2006
APPENDIX C-*PERIODIC INSPECTION CHECKLISTS*
Steel Tank Institute; A Division of STI/SPFA
944 Donata Court; Lake Zurich, IL 60047
Ph: 847-438-8265: Web site: www.steeltank.com

STI SP001 AST Record

OWNER INFORMATION	FACILITY INFORMATION	INSTALLER INFORMATION
Name	Name	Name
Number and Street	Number and Street	Number and Street
City, State, Zip Code	City, State, Zip Code	City, State, Zip Code

TANK ID_____

SPECIFICATION:

Design: ☐ UL_____ ☐ SWRI_____ ☐ Horizontal ☐ Vertical ☐ Rectangular

☐ API_____ ☐ Other_____

☐ Unknown

Manufacturer: **Contents:** **Construction Date:** **Last Repair/Reconstruction Date:**

Dimensions: **Capacity:** **Last Change of Service Date:**

Construction: ☐ Bare Steel ☐ Cathodically Protected (Check one: A. ☐ Galvanic or B. ☐ Impressed Current) Date
Installed_____ ☐ Coated Steel ☐ Concrete ☐ Plastic/Fiberglass ☐ Other
☐ Double Bottom ☐ Double Wall ☐ Lined Date Installed: _____

Containment: ☐ Earthen Dike ☐ Steel Dike ☐ Concrete ☐ Synthetic Liner ☐ Other

CRDM: ☐ **Date Installed:** **Type:**

Release Prevention Barrier: ☐ **Date Installed:** **Type:**

STI SP001 Monthly Inspection Checklist

General Inspection Information:

Inspection Date:_____ **Retain Until Date:** _____ **(36 months from inspection date)**

Prior Inspection Date:_____ **Inspector Name:** _____

Tanks Inspected (ID#'s): _____

Inspection Guidance:

- **For equipment not included in this standard, follow the manufacturer recommended inspection/testing schedules and procedures.**
- **The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.**
- **Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.**
- **(*) designates an item in a non-conformance status. This indicates that action is required to address a problem.**
- **Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.**
- **Retain the completed checklists for 36 months.**
- **In the event of severe weather (snow, ice, wind storms) or maintenance (such as painting) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required immediately following the event.**

Item	Status	Comments
1.0 Tank Containment		
1.1Water in primary tank, secondary containment, interstice, or spill container?	☐**Yes*** ☐**No**	
1.2 Debris or fire hazard in containment?	☐**Yes*** ☐**No**	
1.3 Drain valves operable and in a closed position?	☐**Yes** ☐**No***	
1.4Containment egress pathways clear and gates/doors operable?	☐**Yes** ☐**No***	

2.0 Leak Detection		
2.1 Visible signs of leakage around the tank, concrete pad, containment, ringwall or ground?	**☐Yes* ☐No**	
3.0 Tank Attachments and Appurtances		
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?	**☐Yes ☐No***	
3.2 Tank Liquid level gauge readable and in good condition?	**☐Yes ☐No***	
3.3 Check all tank openings are properly sealed	**☐Yes ☐No***	
4.0 Other Conditions		
4.1 Are there other conditions that should be addressed for continued safe operation or that may affect the site SPCC plan?	**☐Yes* ☐No**	

Additional Comments:

STI SP001 Annual Inspection Checklist

General Inspection Information:

Inspection Date: _____ **Retain Until Date:** _____ **(36 months from inspection date)**

Prior Inspection Date: _____ **Inspector Name:** _____

Tanks Inspected (ID #'s): _____

Inspection Guidance:

- **For equipment not included in this standard, follow the manufacturer recommended inspection/testing schedules and procedures.**
- **The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.**
- **Inspect the AST shell and associated piping, valves, and pumps including inspection of the coating for Paint Failure.**
- **Inspect:**
  1. Earthen containment structures including examination for holes, washout, and cracking in addition to liner degradation and tank settling.
  2. Concrete containment structures and tank foundations/supports including examination for holes, washout, settling, paint failure, in addition to examination for corrosion and leakage.
  3. Steel containment structures and tank foundations/supports including examination for washout, settling, cracking, and for paint failure, in addition to examination for corrosion and leakage.
- **Inspection of cathodic protection system, if applicable, includes the wire connections for galvanic systems and visual inspection of the operational components (power switch, meters, and alarms) of impressed current systems.**
- **Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.**
- **In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).**
- **(*) designates an item in a non-conformance status. This indicates that action is required to address a problem.**
- **Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.**
- **Retain the completed checklists for 36 months.**
- **Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.**
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

Item	Status	Comments
1.0 Tank Containment		
1.1 Containment structure in satisfactory condition?	☐Yes ☐No*	
1.2 Drainage pipes/valves fit for continued service	☐Yes ☐No* ☐ N/A	
2.0 Tank Foundation and Supports		
2.1 Evidence of tank settlement or foundation washout?	☐Yes* ☐No	
2.2 Cracking or spalling of concrete pad or ring wall?	☐Yes* ☐No	
2.3 Tank supports in satisfactory condition?	☐Yes ☐No*	
2.4 Water able to drain away from tank?	☐Yes ☐No*	
2.5 Grounding strap secured and in good condition?	☐Yes ☐No*	
3.0 Cathodic Protection		
3.1 CP system functional?	☐Yes ☐No* ☐n/a	
3.2 Rectifier Reading:		
4.0 Tank External Coating		
4.1 Evidence of paint failure?	☐Yes* ☐No	
5.0 Tank Shell/Heads		
5.1 Noticeable shell/head distortions, buckling, denting or bulging?	☐Yes* ☐No	
5.2 Evidence of shell/head corrosion or cracking?	☐Yes* ☐No	
6.0 Tank Manways, Piping and Equipment within Secondary Containment		
6.1 Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	☐Yes ☐No*	
7.0 Tank Roof		
7.1 Standing water on roof?	☐Yes* ☐No	
7.2 Evidence of coating cracking, crazing, peeling, blistering?	☐Yes* ☐No	
7.3 Holes in roof?	☐Yes* ☐No	

Item	Status	Comments
8.0 Venting		
8.1 Vents free of obstructions?	☐Yes ☐No*	
8.2 Emergency vent operable? Lift as required?	☐Yes ☐No*	
9.0 Insulated Tanks		
9.1 Insulation missing?	☐Yes* ☐No	
9.2 Are there noticeable areas of moisture on the insulation?	☐Yes* ☐No	
9.3 Mold on insulation?	☐Yes* ☐No	
9.4 Insulation exhibiting damage?	☐Yes* ☐No	
9.5 Is the insulation sufficiently protected from water intrusion?	☐Yes ☐No*	
10.0 Level and Overfill Prevention Instrumentation of Shop-Fabricated Tanks		
10.1 Has the tank liquid level sensing device been tested to ensure proper operation?	☐Yes ☐No*	
10.2 Does the tank liquid level sensing device operate as required?	☐Yes ☐No*	
10.3 Are overfill prevention devices in proper working condition?	☐Yes ☐No* ☐N/A	
11.0 Electrical Equipment		
11.1 Are tank grounding lines in good condition?	☐Yes ☐No* ☐N/A	
11.2 Is electrical wiring for control boxes/lights in good condition?	☐Yes ☐No* ☐N/A	

Additional Comments:

STI SP001 Portable Container Monthly Inspection Checklist

General Inspection Information:

Inspection Date:_____ **Retain Until Date:**_____ **(36 months from inspection date)**

Prior Inspection Date:_____ **Inspector Name:**_____

Containers Inspected (ID #'s): _____

Inspection Guidance:

- **For equipment not included in this standard, follow the manufacturer recommended inspection/testing schedules and procedures.**
- **The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.**
- **(*) designates an item in a non-conformance status. This indicates that action is required to address a problem.**
- **Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.**
- **Retain the completed checklists for 36 months.**

Item	Area: _____	Area: _____	Area: _____	Area: _____
1.0 AST Containment/Storage Area				
1.1ASTs within designated storage area?	☐Yes ☐No*	☐Yes ☐No*	☐Yes ☐No*	☐Yes ☐No*
1.2 Debris, spills, or other fire hazards in containment or storage area?	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No
1.3 Water in outdoor secondary containment?	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No
1.4 Drain valves operable and in a closed position?	☐Yes ☐No*	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No
1.5 Egress pathways clear and gates/doors operable?	☐Yes ☐No*	☐Yes* ☐No	☐Yes* ☐No	☐Yes* ☐No
Item	**Area:** _____	**Area:** _____	**Area:** _____	**Area:** _____
2.0 Leak Detection				

2.1 Visible signs of leakage around the container or storage area?	**☐Yes* ☐No**	**☐Yes* ☐No**	**☐Yes* ☐No**	**☐Yes* ☐No**
3.0 Container				
3.0Noticeable container distortions, buckling, denting or bulging?	**☐Yes* ☐No**	**☐Yes* ☐No**	**☐Yes* ☐No**	**☐Yes* ☐No**

Comments:

APPENDIX B Part II
INSPECTIONS, TESTS, RECORDS
Field Erected Tanks Only

American Petroleum Institute (API)
1220 L Street, Northwest
Washington, D.C. 20005-4070
202-682-8161 (Phone)
202-962-4739 (Fax)
Web site: www.api.org

Tank inspection and testing standards for "Field Erected Tanks" typically over 50,000 gallons in size. Inspector must be API 653 Certified.

Reference Industry Standard by US EPA 40 CFR part 112: API Standard 653, Tank Inspection, Repair, Alteration, and Reconstruction, Second Edition, December 1995; including Addendum 1, (December 1996), Addendum 2, (December 1997), Addendum 3, (December 1998) and Addendum 4 (December 1999) and Third Edition December 2001.

NOTE: Field erected tanks that meet the following criteria may use the STI "Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible & Flammable Liquids" SP001-01 for testing and inspection standards appendix. This would only apply to steel ASTs that are as follows:

- Welded and flat-bottom
- Up to 30 feet in diameter and with a height of less than 50 feet (± 265,000 gallons or less).
- Fabricated with full-fusion, butt-welded shells and with lap-welded or butt-welded bottom plates
- Fabricated with a shell thickness of each course less than ½ inch and with original nominal bottom thickness plates equal to ¼ inch or 6 mm
- Built to a nationally recognized standard.

REFERENCE PUBLICATIONS:

A**. API Publications**

API Recommended Practice 575, ***Inspection of Atmospheric and Low-Pressure Storage Tanks***
API Standard 650, ***Welded Steel Tanks for Oil Storage***
API Recommended Practice 651, ***Cathodic Protection of Aboveground Petroleum Storage Tanks***
API Recommended Practice 652, ***Lining of Aboveground Petroleum Storage Tank Bottoms***
API Standard 653, ***Tank Inspection, Repair, Alteration, and Reconstruction***
API Standard 2015, ***Cleaning Petroleum Storage Tanks***
API Publication 2207, ***Preparing Tank Bottoms for Hot Work***

B. **ASME Publications**

American Society of Mechanical Engineers (ASME) ***Boiler & Pressure Vessel Code*****:**
Section V, Nondestructive Examination
Section IX, Welding and Brazing Qualifications

API 653, SECTION 6-INSPECTION

A visual external inspection must be conducted at least every 5 years or RCA/4N years by an authorized inspector. A formal internal inspection must be accomplished every 20 years; or if corrosion rates are not known every 10 years. Authorized Inspector must be API 653 Certified.

The external condition shall be monitored by close visual inspection from the ground on a routine basis. Routine In-Service Inspections performed may be done by owner/operator personnel. Personnel performing this inspection should be knowledgeable of storage facility operations, the tank, and the characteristics of the product stored. The interval of such inspections shall be consistent with the conditions at the particular site, but shall not exceed one month.

The routine in-service inspection shall include a visual inspection (monthly) as the following table indicates: Evidence of leaks; shell distortions; signs of settlement; corrosion; and condition of the foundation, paint coatings, insulation systems, and appurtenances should be documented for follow up action by an authorized inspector. **For a more complete inspection checklist see API-653 Appendix C**

Several factors must be considered to determine inspection intervals for storage tanks. These include but are not limited to, the following:

a. The nature of the product stored.
b. The results of visual maintenance checks.
c. Corrosion allowances and corrosion rates.
d. Corrosion prevention systems.
e. Conditions at previous inspections.
f. The methods & materials of construction & repair.
g. The location of tanks, such as those in isolated or high risk areas.
h. The potential risk of air or water pollution.
i. Leak detection systems.
j. Change in operating mode (for example: frequency of fill cycling, frequent grounding of floating roof support legs).
k. Jurisdictional requirements.
l. Changes in service (including changes in water bottoms).
m. The existence of a double bottom or a release prevention barrier.

APPENDIX C
PRECIPITATION RELEASE FROM SECONDARY CONTAINMENTS
(Ref. 112.8 (b))

FROM US EPA GUIDANCE &/OR REGULATIONS

When secondary containment requirements are addressed through facility drainage controls, the requirements in §112.8(b) (3) and (4), or §112.12(b) (3) and (4) apply. For example, a facility may choose to use the existing storm drainage system to meet secondary containment requirements by channeling discharged oil to a remote containment area to prevent a discharge as described in §112.1(b). The facility drainage system must be designed to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. Catchment basins must not be located in areas subject to periodic flooding (§§112.8(b) (3) and 112.12(b) (3)).

§§112.8(b) and 112.12(b) Facility Drainage:

(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 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.
(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 stormwater, as provided in paragraphs (c) (3) (ii), (iii), and (iv) of this section.

(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.

(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 secondary containment system.

(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.

This record must be completed when rainwater from diked areas is drained into a storm drain or into an open watercourse, lake, or pond, and bypasses the water treatment system. The bypass valve must normally be sealed in closed position. It must be opened and resealed following drainage under responsible supervision.

Evacuation from secondary containment, dikes, impoundments, overflow receptors:

Date	Diked Area	Presence of Oil	Time Started	Time Finished	INSPECTOR'S Signature

APPENDIX D
Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Date	Subjects Covered	Employees in Attendance	Instructor(s)

APPENDIX E
Calculation of Secondary Containment Capacity
The average 24-hour rainfall recorded in the last 25 years at this location is 4.0 inches.

(EPA does not specify a freeboard requirement: i.e. 110% rule of thumb and/or 25 year 24 hour storm event)

Bulk Storage Dike
Capacity of Tanks within the Diked Area:
Tank 1 = 20,000 gallons (saddle-mounted tank, no significant displacement)
Tank 2 = 20,000 gallons (saddle-mounted tank, no significant displacement)
Tank 3 = 20,000 gallons (need to account for tank displacement)
Tank 7 = 10,000 gallons (on legs, no significant displacement)

Dike Dimensions:
Dike footprint = 50 feet x 60 feet
Dike height = 15 inches = 1.25 feet
Dike volume = 50' x 60' x 1.25' = 3750 ft3 x 7.48 gal/ft3 = 28,050 gallons

Displacement Volume of Tank 3:
Tank diameter = 10 feet

3.1415 * (10 ft)2 / 4 * 1.25' = 98 ft3 x 7.48 gal/ft3 = 734 gallons

Available Freeboard for Precipitation:
28,050 gallons - (20,000 gallons + 734 gallons) = 7,316 gallons
7,316 gallons / 7.48 gallons/ft3 / (50 ft x 60 ft) = 0.33 ft = 4 inches

The dike therefore provides sufficient storage capacity for the largest bulk storage container within the diked area, tank displacement, and precipitation. The containment capacity is equivalent to 137% of the capacity of the largest container ((28,050 gallons - 734 gallons)/20,000 gallons).

Loading Rack/Unloading Area Rollover Berm
Capacity of Largest Tank Truck Compartment:
2,000 gallons

Berm Dimensions:
Berm footprint = 28 feet x 45 feet (50% of the berm surface area is covered by the roof)
Berm height = 4.5 inches = 0.375 feet
Berm volume = 28 ft x 45 ft x 0.375 ft = 473 ft3 x 7.48 gal/ft3 = 3,534 gallons

Available Freeboard for Precipitation:
Since 50% of the surface area of the berm is covered by a roof, the volume of precipitation that enters the berm is reduced.
Minimum freeboard required = 28 ft x 45 ft x 0.5 x 3.75/12 = 197 ft3 = 1,472 gallons
Actual freeboard = 3,534 gallons - 2,000 gallons = 1,534 gallons

The berm therefore provides sufficient storage capacity to contain both the largest compartment of tank trucks loading/unloading at the facility, and the volume of precipitation that enters the berm.

FROM US EPA GUIDANCE &/OR REGULATIONS

US EPA Sample calculation of appropriate secondary containment capacity at a transfer area.
Scenario: ***A fuel truck is loading oil into a heating oil tank at a regulated facility, with an attendant present throughout the operation.***
Details: ***The truck is loading at a rate of 150 gallons per minute.***

- ***The reasonably expected source and cause of a discharge is a ruptured hose connection.***
- ***A shutoff valve is present on the loading line and is accessible to the attendant.***
- ***An evaluation determines that the discharge will not impede the attendant's access to the shutoff valve and that he can safely close the valve within 10 seconds of the hose connection rupture, based on past experience under similar circumstances; 15 seconds is assumed to be a conservative estimate of the response time.***

Calculations:
reasonably expected discharge would be calculated to be 150 gallons: [(150 in/60 sec) x (15 sec)] = 37.5 gallons
Conclusion:
Secondary containment volume should be at least 37.5 gallons. A larger volume for secondary containment would be needed if time required to safely close the shutoff valve takes longer than 10 seconds. A number of other factors may also affect the appropriate volume of secondary containment

APPENDIX F
Records of Tank Integrity and Pressure Tests
Attach copies of official records of tank integrity and pressure tests.

APPENDIX G
Agency Notification Standard Report
Information contained in this report, and any supporting documentation, must be submitted to the US EPA Regional Administrator, within 60 days of the qualifying discharge incident.

Facility:	
Owner/operator:	
Name of person filing report:	
Location:	
Maximum storage capacity:	
Daily throughput:	
Nature of qualifying incident(s):	
Description of facility (attach maps, flow diagrams, and topographical maps):	
Cause of the discharge(s), including a failure analysis of the system and subsystems in which the failure occurred:	
Corrective actions and countermeasures taken, including a description of equipment repairs and replacements:	
Additional preventive measures taken or contemplated to minimize possibility of recurrence:	
Other pertinent information:	

APPENDIX H

Discharge Notification Form
(Fill in ASAP after Spill-See Page 2 for Contact Information)

Part A: Discharge Information	
General information when reporting a spill to outside authorities: **Name:** **Address:** **Telephone:** **Owner/Operator:** **Primary Contact:** **Work Phone :** **Cell (24 hrs):**	
Type of Oil:	**Discharge Date and Time:**
Quantity released:	**Discovery Date and Time:**
Quantity released to a waterbody:	**Discharge Duration:**
Location/Source:	
Actions taken to stop, remove, and mitigate impacts of the discharge:	
Affected media: **air** **water** **soil**	**storm water sewer/POTW** **dike/berm/oil-water separator** **other: _____**

Notification person:	**Telephone contact:** **Business:** **24-hr:**	
Nature of discharges, environmental/health effects, and damages: **Injuries, fatalities or evacuation required?**		
Part B: Notification Checklist		
	Date and time	**Name of person receiving call**
Discharge in any amount		
Discharge in amount exceeding 10 gallons and not affecting a waterbody or groundwater		
Local Fire Department		
State Agency of Environmental Management		
Discharge in any amount and affecting (or threatening to affect) a waterbody		
Local Fire Department		
State Agency of Environmental Management		
Part B: Notification Checklist		
	Date and time	**Name of person receiving call**
County LEPC		
National Response Center **(800) 424-8802**		
Other		

APPENDIX I

Discharge Response Equipment Inventory

The discharge response equipment inventory is verified during the monthly inspection and must be replenished as needed.

Tank Truck Loading/Unloading Area

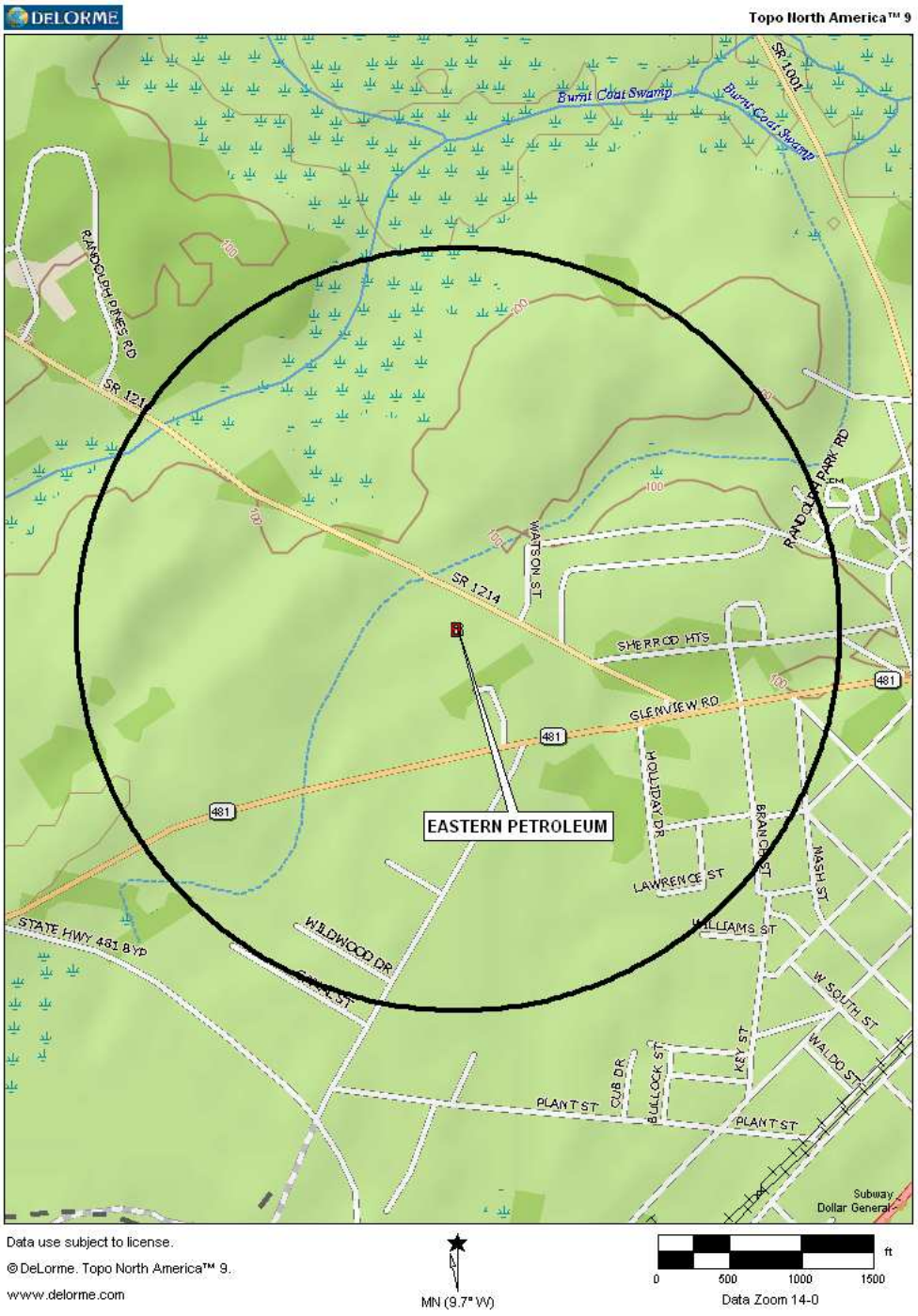
- ❑ **Spill Kits** _____
- ❑ **Empty 55-gallons drums to hold contaminated material** _____
- ❑ **Loose absorbent material** _____ **pounds**
- ❑ **Absorbent pads** _____ **boxes**
- ❑ **Nitrile gloves** _____ **pairs**
- ❑ **Neoprene gloves** _____ **pairs**
- ❑ **Vinyl/PVC pull-on overboots** _____ **pairs**
- ❑ **Non-sparking shovels** _____
- ❑ **Brooms** _____
- ❑ **Drain seals or mats** _____
- ❑ **Sand bags** _____

Shop-Maintenance-Warehouse-Office Building

- ❑ **Spill Kits** _____
- ❑ **Empty 55-gallons drums to hold contaminated material** _____
- ❑ **Loose absorbent material** _____ **pounds**
- ❑ **Absorbent pads** _____ **box**
- ❑ **Nitrile gloves** _____ **pairs**
- ❑ **Neoprene gloves** _____ **pairs**
- ❑ **Vinyl/PVC pull-on overboots** _____ **pairs**
- ❑ **Non-sparking shovels** _____
- ❑ **Brooms** _____
- ❑ **Drain seals or mats** _____

APPENDIX J
TOPO Map of Area/General Area Map

N ↑ **GPS Data 35º 43' 08" –N; 79º 27' 45" –W; Circle Radius: ½ mile**



(END OF MODEL SPCC PLAN)

APPENDIX K
STAND ALONE CONTINGENCY PLAN
ALTERNATIVE OIL SPILL CONTINGENCY PLAN
Ref. 112.7 (d) & 40 CFR part 109

FROM US EPA GUIDANCE &/OR REGULATIONS A sample Contingency Plan from US EPA can be downloaded at: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors

EPA recognizes that, although engineered passive containment systems (such as dikes and drainage systems) or active secondary containment approaches are preferable, they may not always be practicable. If a facility owner/operator finds that containment methods are "impracticable," alternative modes of protection to prevent and contain oil discharges are available. The impracticability provision found in §112.7(d) allows facility owners/operators to substitute a combination of other measures in place of secondary containment: (1) periodic integrity testing of bulk storage containers and periodic integrity testing and leak testing of the valves and piping associated with the containers; (2) unless they have submitted a Facility Response Plan (FRP) under §112.20, an oil spill contingency plan; and (3) a written commitment of manpower, equipment, and materials required to control and remove any quantity of oil discharged that may be harmful. If an impracticability determination is made, the SPCC Plan must clearly describe why secondary containment measures are impracticable and how the specified additional measures are implemented (§112.7(d)).

Applicable only if containment structures and provisions of preceding paragraph, "Containment and Drainage Control Structures", are not practicable. Owner must demonstrate the impracticability by explanation and justification. This CONTINGENCY Plan must be a "stand-alone" section of the SPCC Plan and must be sent to the EPA Regional Administrator, for their review and approval.

Under 40 CFR 112.7 (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.

US EPA believes that it may be appropriate for an owner or operator to consider costs or economic impacts in determining whether he can meet a specific requirement that falls within the general deviation provision of §112.7(a)(2). EPA states that cost can be considered but cannot be the only consideration. EPA believes so because under this section, the owner or operator will still have to utilize good engineering practices and come up with an alternative that provides "equivalent environmental protection." However, EPA believes that the secondary containment requirement in §112.7(d) is an important component in preventing discharges as described in §112.1(b) and is environmentally preferable to a contingency plan prepared under 40 CFR part 109. The owner or operator may only provide a contingency Plan in his SPCC Plan and otherwise comply with §112.7(d). Therefore, the purpose of a determination of impracticability is to examine whether space or other geographic limitations of the facility would accommodate secondary containment; or, if local zoning ordinances or fire prevention standards or safety considerations would not allow secondary containment; or, if installing secondary containment would defeat the overall goal of the regulation to prevent discharges as described in §112.1(b). EPA clarifies their main point that owners must not opt for a contingency plan in place of containment simply because contingency plans are cheaper. Without question, secondary containment is a top priority of the EPA and marketers must demonstrate best efforts in attempting to provide containment where practical.

This Oil Spill Contingency Plan is prepared in accordance with 40 CFR 112.7(d) to address areas of the facility where secondary containment is impracticable, as documented in this facilities Spill Prevention, Control, and Countermeasure (SPCC) Plan.

This Oil Spill Contingency Plan follows the content and organization of 40 CFR part 109 and describes the distribution of responsibilities and basic procedures for responding to an oil discharge and performing cleanup operations.

Facility _____Mayberry Oil Company
Street Address _____101 Don Knots Road
Mailing Address _____P.O. Box 109, Mount Airy, N.C. 27000

MANAGEMENT APPROVAL
Authorized Agents Name: _____ Title: President
Signature _____

SPCC CONTINGENCY PLAN ENGINEERING CERTIFICATION

The undersigned Registered Professional Engineer is familiar with The Oil Spill Contingency Plan requirements in accordance with 40 CFR 112.7(d) to address areas of the facility where secondary containment is impracticable, as documented in this facilities Spill Prevention, Control, and Countermeasure (SPCC) Plan.

The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR part 112.7 (d) part 109; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility. [40 CFR 112.3(d)] This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

This engineer nor his agent did not test for proper operation of any electrical/mechanical/safety equipment, overfill devices, vents, emergency venting, valves, corrosion control systems and any other equipment systems not specifically mentioned.

Name: Gomer Pyle, PE # 122212
Wallies Engineering Services, 123 Griffin Ave., Mount Airy, NC 27222: 919-782-1964
Signature: _____ (SEAL)
Date: January 1, 2007

CONTENTS

CONTINGENCY PLAN DETAILS

The purpose of this Oil Spill Contingency Plan ("Contingency Plan") is to define procedures and tactics for responding to discharges of oil into navigable waters or adjoining shorelines of the United States, originating from transport unloading and loading racks areas at Mayberry Oil Bulk Oil Storage Facility. The Contingency Plan is implemented whenever a discharge of oil has reached, or threatens, navigable waters or adjoining shorelines.

The objective of procedures described in this Contingency Plan is to protect the public, Mayberry Oil personnel, and other responders during oil discharges. In addition, the Plan is intended to minimize damage to the environment, natural resources, and facility installations from a discharge of oil. This Oil Spill Contingency Plan complements the prevention and control measures presented in the facility's SPCC Plan by addressing areas of the facility that have inadequate secondary containment and impacts that may result from a discharge from these areas. This facility implements a detailed and stringent maintenance and training program to prevent spills and leaks from the truck transports and unloading piping connections. Areas lacking adequate containment at this facility are the truck transport unloading areas and loading rack areas.

Demonstration and Justification of Impracticability

This facility was constructed approximately 45 years ago when fire, safety, and environmental codes were either non-existent or profoundly simple. The continuing arrangement of storage facilities, the available space limitations, (geographical limitations), and the loading/unloading facilities arrangement, all make an effective containment system economically and structurally (regarding the surface of the facility) impracticable. It this engineers opinion that secondary containment for transport unloading areas and loading rack be provide for in part by booms, sorbent materials or other barriers. This can meet equivalent environmental protection for spills less than 3,000 gallons when cleanup begins immediately.

The only feasible alternatives would be either to demolish the bulk plant transport unloading areas and begin anew or to continue functioning with suitable contingency provisions.

The transfer unloading operations are one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car, or other storage, equipment, or device. Areas where oil is transferred but no loading or unloading rack is present are subject to §112.7(c), and thus appropriate containment and/or diversionary structures are required. EPA does not require specifically sized containment for transfer areas; however, containment size must be based on good engineering practice (§112.3(d)).

In this situation, permanent containment structures, such as dikes, are not feasible. Section 112.7(c) allows for the use of certain types of active containment measures (countermeasures or spill response capability), which *prevent a discharge to navigable waters or adjoining shorelines.* Active containment measures are those that require deployment or other specific action by the owner or operator. These measures may be deployed either before an activity involving the handling of oil starts, or in reaction to a discharge so long as the active measure is designed to prevent an oil spill from reaching *navigable water or adjoining.*

Active measures (countermeasures) include, but are not limited to:

- Placing a properly designed storm drain cover over a drain to contain a potential spill in an area where a transfer occurs, *prior* to the transfer activity. Storm drains are normally kept uncovered; deployment of the drain cover prior to the transfer activity may be an acceptable active measure to prevent a discharge from reaching navigable waters or adjoining shorelines through the drainage system.
- Placing a storm drain cover over a drain in reaction to a discharge, before the oil reaches the drain. If deployment of a drain cover can *reliably* be achieved in time to prevent a discharge of oil from reaching navigable waters or adjoining shorelines, this may be an acceptable active measure. This method may be risky, however, and is subject to a good engineering judgment on what is realistically and reliably achievable, even under adverse circumstances.
- Using spill kits in the event of an oil discharge. The use of spill kits, strategically located and ready for deployment in the event of an oil discharge, may be an acceptable active measure, in certain circumstances, to prevent a spill from reaching navigable waters or adjoining shorelines. This method may be risky and is subject to good engineering judgment, considering the volume most likely expected to be discharged and proximity to navigable waters or adjoining shorelines.
- Use of spill response capability (spill response teams) in the event of an oil discharge. This method differs from activating an oil spill contingency plan (such as required in §112.7(d)) because the response actions are specifically designed to contain an oil discharge *prior to reaching navigable waters or adjoining shorelines.* This may include the emergency construction/deployment of dikes, curbing, diversionary structures, ponds, and other temporary containment methods (such as sorbent materials-haybales) so long as they can be implemented in time to prevent the spilled oil from reaching navigable waters or adjoining shorelines. This method may be risky and is subject to good engineering judgment.

Resources at Risk:

This facility is located approximately 500 feet from downtown Mayberry, NC (see maps page __).
The waterways closest to the facility are dry drainage ditches, catch basins and tributaries to Curl Tail Creek. Curl Tail Creek is approximately ½ mile northeast of the facility. The facility diagram included in Attachment I indicates the location of the bulk oil storage. Ground cover at the facility consists of compacted soil, gravel, concrete, asphalt and low lying vegetation. The natural topography of the land is graded in a north direction, and all surface drainage from the facility therefore flows towards Curl Tail Creek. The slope is relatively mild.

Risk Assessment:

The total daily transfer rate at the facility varies, but can reach as much as 25,000 gallons of Refined petroleum. The facility is operated daily 5 days a week. For planning purposes, the worst-case discharge is the largest compartmental volume of a truck transport at 3,000 gallons.

A discharge of this quantity could potentially reach Curl Tail Creek during a heavy rainstorm. If storm drain culverts are impacted by the spill, and culverts travel the entire ½ mile, than the petroleum could travel the ½ mile at a velocity of approximately 30 feet per minute. Considering the velocity of storm water petroleum mix in the storm drain culverts, Curl Tail Creek would be impacted within 1.3 hours.

Since there are no transfers of petroleum by automatic means and all transfers involved oil company personnel, clean-up can began instantaneously by employees applying stored containment materials and the application of catch basin drain seal posted nearby.

The risk of 3,000 gallons (at 250 gpm) spill is remote due to the continued manned aspect of the truck unloading process involving shut-off valves at strategic locations, dead man valves and assessable pump shut off switches.

Catch basin drain mats can be deployed within 30 seconds of a spill to contain spill on property. Booms can be deployed within 5 minutes. Clean up operations can begin within 1 minute once spill is contained.

EPA recommends that a determination of adequate secondary containment consider:

- The reasonably expected sources and causes of a discharge. This could be a failed hose connection; failed valve; overfill of a container, tank truck, or railroad tank car; or breach of a container. Determination would be based on the type of transfer operation, facility experience and spill history, potential for human error, etc.
- The reasonably expected maximum rate of discharge. This will be dependent on the mode of failure. It may be equal to the maximum rate of transfer or the leakage rate from a breached container.
- The ability to detect and react to the discharge. This will be dependent on the availability of monitoring instrumentation for prompt detection of a discharge and/or the proximity of personnel to detect and respond to the discharge.
- The reasonably expected duration of the discharge. This will be dependent on the availability of manual or automatic isolation valves, the proximity of qualified personnel to the operation, and other factors that may limit the volume of a discharge.
- The time it would take a discharge to impact navigable waters or adjoining shorelines. This could depend on the proximity to waterways and storm drains, and the slope of the ground surface between the loading area and the waterway or drain.

Integrity Tests & Maintenance

Employees during the normal performance of their duties will visually check aboveground storage tanks daily. As explained in another section of this Plan (pgs 10, 11 & 12), formal inspections of tanks and their inspections will be made periodically. Unloading connection fitting, loading rack pumps and shut-off valves shall be inspected daily in accordance with pages 10, 11, & 12 of the SPCC Plan.

Description of Response Plans

Spill detection and reporting procedures will be made according to the following restatement of "Contact List and Telephone Numbers" from page 3 of this SPCC Plan:

CONTACT LIST AND TELEPHONE NUMBERS

1. Local Fire Department: - 911
2. "Person-In-Charge" of Facility Spill Response & Home Telephone Number and Street Address:

Name: Barney Phife
Home Address: PO Box 141, Mayberry, NC 28137
Home Phone: 828-463-5722
Home Office Phone: 828-463-7543

3. Local Emergency Planning Committee or Haz-Mat Response Team, Telephone Number: Raleigh County Emergency Management; 828-986-3650, Albemarle, NC
4. Emergency Cleanup Contractor or Response Facility Name, Telephone Number: _____
5. State Division of Environmental Management: 919-733-5291 (must call)
6. State Emergency Response Commission: 1-800-451-1403 (must call)
7. Downstream Water Suppliers who need to be notified: _____
8. National Response Center: 1-800-424-8802 (must call)

The Response Plan will be administered by the "Person-In-Charge" as named above. It will depend upon specific duties to be performed by designated persons as identified in the subparagraphs below. As explained under "Personnel Training", all employees have been rehearsed in a spill scenario. Appropriate personnel have investigated the potential route of moving spillage and have noted available curbs, storm drains, culverts, and ditching that are accessible for counteraction efforts: erection of ditches or barricades, berms, absorbent booms, siphons, and sandbags. In an oil spill emergency, the following steps will to taken:

1. Source of spill will be stopped, if possible, by person having control of the related facility or by the person discovering such spill. **Mayberry Oil** Personnel will direct spilled petroleum to on site construction of a dam of booms/pads between Car Wash Bay and Catch Basins. Must be OSHA trained under certain conditions.
2. The office will be notified at once, and the "Person-In-Charge" for oil spill events and oil prevents will be summoned at once. The employee who is designated to perform emergency contacts is Barney Phife.
3. The "Contact" person shall immediately summon the fire department, which shall assess and abate fire safety hazards as necessary. The use of foam rather than water will be urged for abating flammability hazards. (See Contact list). If the spill occurs within diked areas, water will be introduced at once to foam a layer under the oil. Employees will observe OSHA Standards as necessary regarding respirators, fire safety, etc.
4. The "Contact" person shall then notify the Local Emergency Planning Committee and its HAZ MAT Team, if the situation, as assessed by the "Person-In-Charge", so requires. (See Contact List)
5. Concurrent with steps 3 and 4, the "Person-In-Charge" or his designee, shall verify that containment of the spillage is effective or begin taking countermeasure actions in the spill pathway as necessary. He shall also determine if general evacuation of employees from the premises is advisable at this time and take action accordingly.
6. Personnel needs: The "Countermeasure" actions in "5" will include access to an on-site, dedicated, identified cache of emergency response items including: absorbent pellets; absorbent pillars; 8"x10'long (approx.) absorbent booms; set of assorted hand tools; prefabricated catch basin drain seals; 2" portable transfer pump; 55 gallon empty drums; sandbags; and if needed half-mask respirators (for gasoline exposure). Personnel must have OSHA HAZARDOUS MATERIALS training in certain applications.

   The actions will require the following employees to assist the "Person-In-Charge".
   (a) _____
   (b) _____
   (c) _____
   (d) _____
   (e) _____
7. Concurrent with steps "5" and "6", the contact person will report the spill to the State Division of Environmental Management and the National Response Center. (see Contact List).
8. If the magnitude and difficulty of the spill appear to increase the probability of loss of control and loss of containment, the "Person-In-Charge" shall summon a prearranged oil spill emergency cleanup contractor to mobile oil spill response unit as owned by the local cooperative. This unit is identified as (4) under Contact List and Telephone Number on Contact List.
9. The "Contact" person will report the spill to the State Emergency Response Commission (see Contact List).

10. The "Contact" person, as advised by the "Person-In-Charge" according to the circumstances, will notify downstream water suppliers. (See Contact List)
11. The "Person-In-Charge" will direct that retrieval of spilled oil be initiated at the earliest feasible time. Retrieval methods will utilize absorbents, portable transfer pump and holding tank, skimmer pump, or other appropriate equipment.

Commitment of Manpower, Equipment, Materials

The Owner has made careful study and consideration of this Contingency Plan, and his financial requirements to achieve immediate compliance. He also has assessed the financial impact of an oil spill cleanup situation with respect to the costs of employee's time, costs of a cleanup contractors or oil-spill cooperative use, costs of remediation, and costs of record keeping and documentation. By the "Authorized Signature" under "Management Approval" on the cover sheet of this Contingency Plan, the owner/operator also commits for necessary financial commitment.

Commitment of Spill Response Capability

(Describe sources, locations, commitment arrangements, dedicated equipment and materials, mobility.)

The owner has established the following plan of action. If a major spill occurs, the following steps will be enacted:

1. Spill source will be stopped if possible.
2. Office will be notified concurrent with stoppage effort.
3. Local Fire Department will be summoned, if circumstances require their presence.
4. Spill will be contained on site if safe and possible. (See section C)
5. Absorbent, sand and dedicated tools are stored on site at the bulk plant.
6. State and Federal oil spill notifications will be made (see page 3).
7. Cleanup and restoration measure will be performed.

Methods of Oil Spill Removal:

Contaminated soil will be removed by the cleanup contractor or the facility's employees and placed upon plastic or in trucks for transportation to disposal site. The extent of soil removal and site remediation will be under the explicit guidance of the State Division of Environmental Management Regional Office. The Facility's "Person-In-Charge" will assure that the necessary tests, documents, and train of events as required by the State Division of Environmental Management Regional Office is in full compliance. Final method of disposal of contaminated soil will depend, in part, upon the State Division of Environmental Management Regional Office and may include land-farm application, incineration, or integration into brick-making.

Methods of Mechanical-Manual Containment:

Every effort must be made to contain the spill on the property. The petroleum spill must not leave the property and must not enter storm drains, or tributaries to creeks and streams. If spill reaches open ditching or storm drain catchment basins, than sand bags, absorbents, drain plugs, haybales, or other material must be used to dam the ditch or seal the drains and prevent further downstream migration. If spilled petroleum leaves the property than Stanly County Emergency Management and City/County Fire Department must be notified ASAP (see contents list).

The discharge response equipment inventory is verified during the monthly inspection and must be replenished as needed. These materials are stored in Warehouse #1 and #2

Access and Availability of sorbents, containment booms, accessories:

Tank Truck Loading/Unloading Area & Aboveground Pipelines Equipment Must Absorb or Contain 3,000 gallons (Based on 250 gpm flow rate for 12 minutes)

- ❑ half-mask respirators (for gasoline exposure) _____
- ❑ 2" portable transfer pump _____
- ❑ 5"x10'long (approx.) absorbent booms _____
- ❑ Empty 55-gallons drums to hold contaminated material _____
- ❑ Loose absorbent material _____pounds
- ❑ Absorbent pads _____boxes
- ❑ Nitrile gloves _____ pairs
- ❑ Neoprene gloves _____ pairs

- ❑ Vinyl/PVC pull-on overboots _____ pairs
- ❑ Non-sparking shovels _____
- ❑ Brooms _____
- ❑ Drain seals or mats _____
- ❑ Sand bags _____
- ❑ Hay Bales _____
- ❑ Other Items _____

Shop-Maintenance-Warehouse-Office Building
Equipment Must Absorb or Contain 550 gallons (Based on Ten 55 gallon drums)

- ❑ half-mask respirators (for gasoline exposure) _____
- ❑ 2" portable transfer pump _____
- ❑ 8"x10'long (approx.) absorbent booms _____
- ❑ Empty 55-gallons drums to hold contaminated material _____
- ❑ Loose absorbent material _____ pounds
- ❑ Absorbent pads _____ box
- ❑ Nitrile gloves _____ pairs
- ❑ Neoprene gloves _____ pairs
- ❑ Vinyl/PVC pull-on overboots _____ pairs
- ❑ Non-sparking shovels _____
- ❑ Brooms _____
- ❑ Drain seals or mats _____
- ❑ Hay Bales _____
- ❑ Other Items _____

Booms: Form a continuous barrier placed as a precautionary measure to contain/collect oil. Typically used for the containment, exclusion, or deflection of oil floating on water, and is usually associated with an oil spill contingency or facility response plan to address oil spills that have reached surface waters. Beach booms are designed to work in shallow or tidal areas. Sorbent-filled booms can be used for land-based spills. There are very limited applications for use of booms for land-based containment of discharged oil.
Barrier: Spill mats, storm drain covers, and dams used to block or prevent the flow of oil. Temporary barriers may be put in place prior to a discharge or after a discharge is discovered. These are both considered effective active containment measures (or countermeasures) as long as they can be implemented in time to prevent the spilled oil from reaching navigable waters and adjoining shorelines.
Sorbent Materials: Insoluble materials or mixtures of materials (packaged in forms such as spill pads, pillows, socks, and mats) used to recover liquids through the mechanisms of absorption, adsorption, or both. Materials include clay, vermiculite, diatomaceous earth, and man-made materials. Used to isolate and contain small drips or leaks until the source of the leak is repaired. Commonly used with material handling equipment, such as valves and pumps. Also used as an active containment measure (or countermeasure) to contain and collect small-volume discharges before they reach waterways.

END OF SPCC CONTINGENCY PLAN

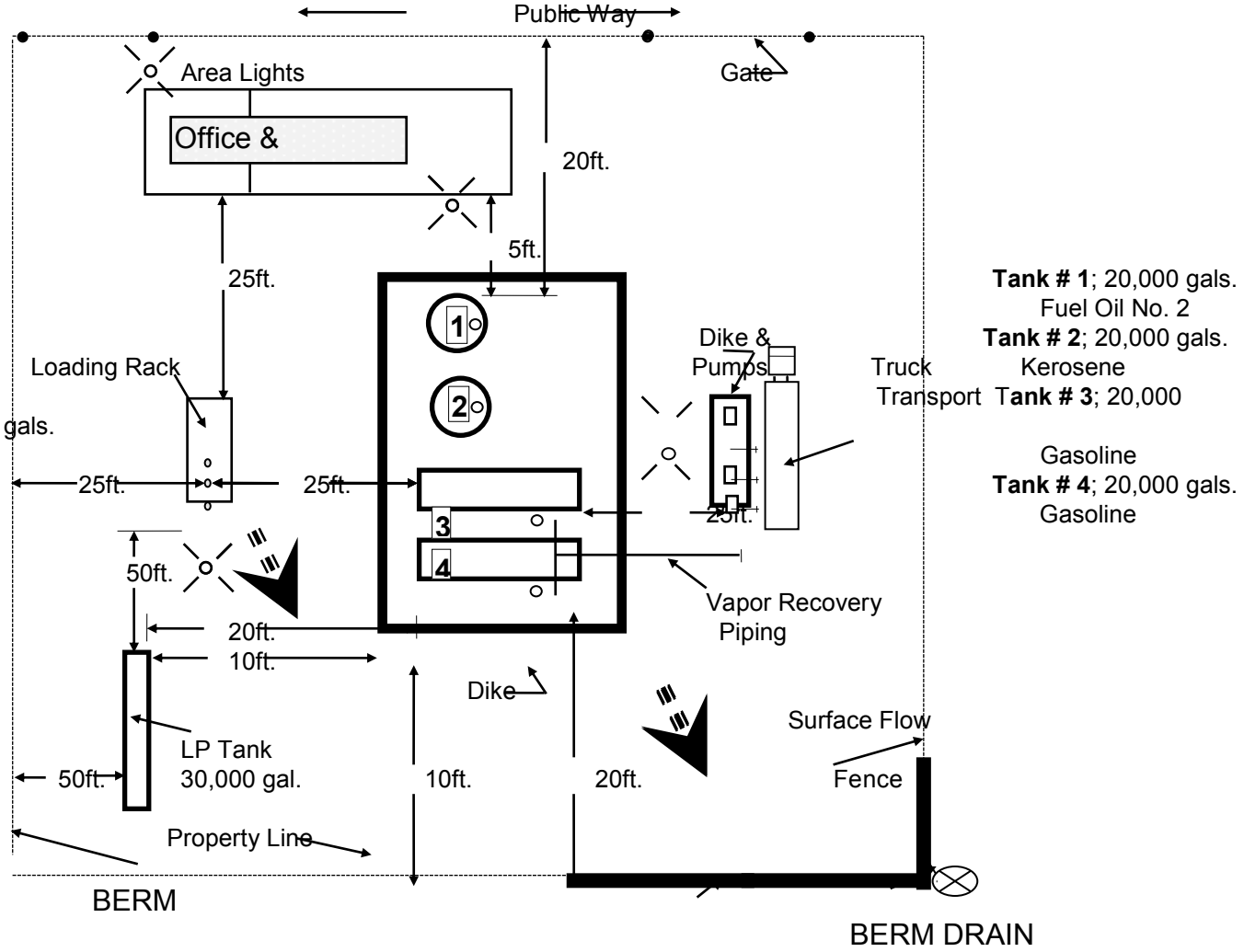
DRAWING OF FACILITY

(Ref. 112 7 (a) (3)

FROM US EPA GUIDANCE &/OR REGULATIONS Requirements for a Facility Diagram

A description of the physical layout of a facility, including a facility diagram, is one of the general requirements for an SPCC Plan. The 2002 revisions to the SPCC rule added a new specific requirement in §112.7(a)(3) for a facility diagram to be included in the Plan. Section 112.7(a)(3) requires that the facility diagram include the location and contents of each container, completely buried tanks (even if exempted from the SPCC requirements), transfer areas (i.e., stations), and connecting pipes. In addition to the requirement for a facility description and diagram, §112.7(a)(3) lists additional items to be addressed in an SPCC Plan, including the type of oil in each container and its capacity; discharge prevention measures; discharge or drainage controls; countermeasures for discharge discovery, response, and cleanup; methods of disposal of recovered materials; and specific contact information.

TYPICAL BULK PLANT INSTALLATION LAYOUT

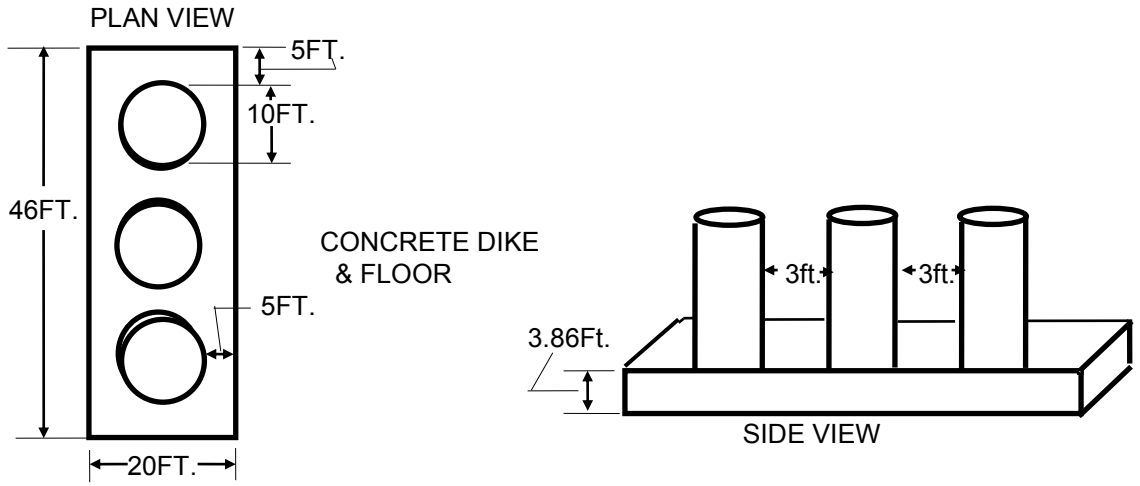


NO SCALE

Certain containers and piping, exempted from SPCC requirements in the 2008 amendments, must be identified on the facility diagram and marked as "exempt." Includes: Underground storage tanks at nuclear power generation facilities; and Intra-facility gathering lines subject to the requirements of 49 CFR part 192 or 195

SECONDARY CONTAINMENT VOLUME REQUIREMENTS FOR ASTs

The US EPA has established regulations requiring spill prevention and control for aboveground storage tanks greater than 1,320 gallons or two tanks with total capacity greater than 1320 gallons. The National Fire Protection Association (NFPA) requires secondary containment for ASTs greater than 60 gallons. Secondary containment may be dikes, berms, remote impounding or other various means. Dikes and berms must hold the single largest tank plus sufficient freeboard allowances. The freeboard allowance in NC is typically the minimum dike wall height to contain the single largest tank volume plus 6 inches. The dike floor and area is required to be coated, lined or be sufficiently impervious earth to prevent seepage.



Consider the above drawing and example dike volume design procedure. We have three 20,000 gal. vertical tanks. Tanks are 10 Ft. in Diameter with a radius of 5 Ft., 5 Ft. from dike walls and 3 Ft. from each other. For our example we will add ten percent to the single largest tank which would equal 22,000 gals for freeboard allowance. Convert gallons to cubic feet by dividing gallons by 7.48 gals./cubic Ft. Therefore, 22,000 gals. ÷ 7.48 = 2942 Cubic Feet. The minimum area of the pad is 20 Ft. X 46 Ft. = 920 Square Feet. The other two tanks must be taken into consideration for their displacement area by calculating ☆ X radius squared X 2 tanks. Therefore, 3.14 X 5^2 X 2 = 157 $Ft.^2$ Net dike available area, 920 $Ft.^2$ - 157 $Ft.^2$ = 763 $Ft.^2$ To determine dike wall height, divide 2942 $Ft.^3$ by 763 $Ft.^2$ = 3.86 Ft. or 3 Ft. 11 inches high.

Tanks should be kept at a minimum of 3 feet from the toe of the dike wall. Calculations for horizontal tanks would follow the same procedure. Horizontal tank ends must be kept a minimum of 3 feet inside dike wall. For one tank only, use dike length X dike width X dike height = cubic feet, then convert to gallons to match minimum volume needed.

EPA SPCC PLAN WORK SHEET
(Circle correct information)

Facility Type: Bulk Plant/Terminal/Refinery/Production Public/Private Motor Fuel Farm
Commercial/Manufacturing/Governmental/Institutional Other_____
Unmanned Facility YES NO
Facility Address:_____
_____Phone:_____

1) TANKS, RAIL CARS, TANKERS

Are tanks UL rated and or industry (API Riveted) certified:	**YES**	**NO**
Do tanks have proper emergency vents:	**YES**	**NO**
Do tanks have proper pressure/vacuum vents:	**YES**	**NO**
Corrosion Inspection needed:	**YES**	**NO**
TANK Painting needed: (gasoline tanks White or Silver)	**YES**	**NO**
Spill-Overfill Systems Installed	**YES**	**NO**

Tanks installed on: gravel concrete/asphalt earth steel masonry
Vertical Tanks have barrier between the bottom and the ground, designed and operated in a way that ensures that any leaks are immediately detected. YES NO
Tanks meet US EPA equivalent environmental protection? YES NO
Tanks are gauged for product level by: Hand/Stick tape gauge electronic/hydrostatic
Approximate Age of Tanks is_____years.
Tanks are: Vertical Horizontal Both Types on Site

2) LOADING RACKS (IF APPLICABLE)
Loading Rack & Pad constructed of: concrete/steel gravel/steel concrete/wood gravel/wood
Loading Rack Pad secondary containment: (A) CONCRETE ASPHALT OR GRAVEL pad with RAISED CURB or SLOPED VIA CHANNELS to: oil/water separator (size-_____gals.) and/or to UST overflow tank (size-_____gals.) and/or to Dike or remote Berm area. Loading Rack secondary containment will hold approximately _____gallons
(B) No secondary containment for concrete/gravel loading rack pad.

Spillage is conducted to secondary containment via: grate drains; UG piping; slope of the area.
Fire Extinguisher and Warning Information: YES NO

3) TRANSPORT UNLOADING AREAS
Transport Unloading Pad secondary containment: (A) CONCRETE ASPHALT OR GRAVEL pad with RAISED CURB or SLOPED VIA CHANNELS to: oil/water separator (size-_____gals.) and/or to UST overflow tank (size-_____gals.) and/or to Dike or remote Berm area. Transport unloading area secondary containment will hold approximately _____gallons
(B) No secondary containment for concrete/gravel pad.
Transport unloading and loading rack share secondary containment systems? YES NO

Spillage is conducted to secondary containment via: Grate drains and UG piping; Slope of the spill area

Spillage is prevented at unloading connections by: Concrete Basin Buckets Sand Traps Dike Nothing
Stage I Vapor Recovery piping needed (gasoline only) YES NO

4) SECONDARY CONTAINMENT AREAS
Tanks have secondary containment via: Dike Berm Remote-Impounding Lagoon Double-Wall Tanks Other_____
Secondary Containment constructed of: Concrete Block/Form Earth Rock/Gravel Steel Clay Other_____

Secondary Containment floor is constructed of: Concrete Earth/Gravel Steel Liner
Floor is impervious to Gasoline for 72 hours: YES NO Unknown
Drainage from secondary containment by: Valve Pump/Sump Siphon
Evaporation Pipe Plug Other_____
Dike drain valve is installed, YES NO and lockable: YES NO

5) WAREHOUSE AND OFFICE AREAS

Warehouse stores motor oil/lubes: YES NO
Maximum Capacity of stored lubricants: _____gals.
Stored in: 55 gal. drums, retail size quarts, 5 gals. pails, various sizes
Secondary Containment for Lube storage Areas: YES NO

6) PUMPS & PIPING

Piping is: AG Steel UG Steel, UG Fiberglass UG Double Wall/Flex
Piping from tanks to pumps is: aboveground underground
Piping from pumps to loading racks is: aboveground underground
Piping from pumps to transfer area is: aboveground underground
Piping from pumps to dispensers is: aboveground underground
Lockable Valves installed on tank pipe outlet: YES NO
Piping is properly I.D. under API Standards: YES NO
Pumps installed on: concrete/steel pad Gravel Earth
Secondary Containment for Pumps/Piping: YES NO

7) REPAIRS NEEDED

Dike/Berm Wall cracks, holes, wore down YES NO
Pipe and Valve Leaks YES NO
Loading Racks YES NO
Pumps YES NO
Roads, Pads, Drainage areas YES NO
General Clean up in Equip-Tank areas YES NO
Damaged Tanks in use YES NO

8) OTHER

Stored spill containment/clean-up material on site: YES NO
Area Lights (show on print): YES NO
Fence and gates (show on print): YES NO
Public or Private Vehicle Dispensing Occurs at this Facility: YES NO
NFPA 30 & 30-A & IFC standards met: YES NO
Spills within the last 12 months: YES NO
Distance to Navigable Water from Tanks: _____
Direction of Nearest Navigable Water from Property: N NE E SE S SW W NW

GPS INFO: N W

NOTES:

Site specific conditions will determine baseline condition requirements:
Maintenance & Water removal Records: YES NO
Interim I&M for proper maintenance to be implemented YES NO
Integrity Test for base line conditions YES NO

EMERGENCY CONTACT LIST AND TELEPHONE NUMBERS
(Ref. 112.7)

1. Local Fire Department: - 911
2. "Person-In-Charge" of Facility Spill Response:
   Home Telephone Number and Street Address:
   Name:
   Home Address:
   Home Phone:
   Home Office Phone:

3. Local Emergency Planning Committee or Haz-Mat Response Team, Telephone Number: _____ County Emergency Management;
4. Emergency Cleanup Contractor or Response Facility Name, Telephone Number:
   _____

5. State Division of Environmental Management: XXX-XXX-XXXX (must call)
6. State Emergency Response Commission: XXX-XXX-XXXX (must call)
7. Downstream Water Suppliers who need to be notified: _____
   _____
8. National Response Center: 1-800-424-8802 (must call)

Part 2: General Facility Information

Name: _____
Address: _____
Main Office Phone: _____
Facility Type: Date of Initial Operations: _____

Owner/Operator: _____

Work Phone _____
Cell (24 hours):

Course Summary

To safeguard the waters of the United States, licensed professional engineers must fully understand the EPA requirements and provisions contained in 40 CFR Part 112, Oil Pollution Prevention Act (Spill Plan Regulation). Most oil and petroleum storage facilities are required to have on filed a SPCC Plan.

A partial list of "oils" include: Cutting Oils, Transformer Oils, Animal & Vegetable Fats/Oils, Asphalts, Naphtha, Lacquer Base Paints/Varnishes, Jet Fuel, Heating Oils, Gasoline, Distillate/Residual Oils, and Mixes/Mixtures of Benzene, Toluene, & Xylene. "Pure" petroleum chemicals such as Xylene, Toluene, & Benzene are not "oils" per the SPCC regulation.

Revised January 16,-2019