Winston, Kathy

From: Lucas Barroso-Giachetti <lucas@gleassociates.com>
Sent: Friday, September 19, 2014 11:23 AM
To: Winston, Kathy
Cc: HJ ASPHALT
Subject: RE: H&J Asphalt - Miami Facility - Final SPCC Plan
Attachments: H&J Asphalt Miami Facility SPCC_FINAL_091714.pdf

Kathy,

Good morning. Please find the attached SPCC Plan for the H&J Asphalt facility for your review. We are sending out hard copies for the facility's use and records today.

We reduced the file size to less than 3 MB, so I'm hoping you receive this without any problems.

Please let me know if you have any questions at 954.968.6414 and have a good weekend,

Lucas

From: Winston, Kathy [mailto:Kathy.Winston@dep.state.fl.us]
Sent: Wednesday, September 10, 2014 11:56 AM
To: Lucas Barroso-Giachetti
Cc: HJ ASPHALT
Subject: RE: H&J Asphalt - Miami Facility

The would be fine. That is probably the best solution, as our email has limited capacity. Glad to hear things are moving along and thanks for getting back to me so quickly.

From: Lucas Barroso-Giachetti [mailto:lucas@gleassociates.com]
Sent: Wednesday, September 10, 2014 11:53 AM
To: Winston, Kathy
Cc: HJ ASPHALT; Paul Belyea
Subject: RE: H&J Asphalt - Miami Facility

Good morning Kathy,

The good news is that the SPCC Plan is near completion; a draft SPCC document was already submitted to H&J Asphalt and it is under review as we speak.

We expect to finalize the SPCC Plan next week and have that ready for your review. What's the best way to provide you with a copy? For a document of this size, we can provide you with a download link for the complete PDF. Will that work?

Please let me know and thanks!

Lucas
GLE

From: Winston, Kathy [mailto:Kathy.Winston@dep.state.fl.us]
Sent: Wednesday, September 10, 2014 11:37 AM
To: Lucas Barroso-Giachetti
Cc: HJ ASPHALT
Subject: RE: H&J Asphalt - Miami Facility

Mr. Barroso-Giachetti, I am wondering how you are progressing with the SPCC Plan that your were working on for H & J Asphalt. I haven't received any correspondence from your company or H & J Asphalt since August 11th. Please let me know how soon I can expect to see that document. I am aware that one of our Stormwater inspectors visited the site since my visit and I am interested to know if there were any items requests in relation to that inspection. Please get back to me soon. If you still need time, that can probably be arranged; however, you need to be keeping me in the loop. Thanks so much for your cooperation in this matter.

From: Lucas Barroso-Giachetti [mailto:lucas@gleassociates.com]
Sent: Thursday, August 7, 2014 2:39 PM
To: Winston, Kathy
Cc: HJ ASPHALT
Subject: H&J Asphalt - Miami Facility

Kathy,

Thanks for your time to discuss the H&J Asphalt facility in Miami and I look forward to working with you. As I mentioned, we've been retained by H&J Asphalt to assist with the SPCC Plan and other related efforts.

Please find my contact info below and don't hesitate to contact me with any questions.

Thanks!

Lucas

Lucas A. Barroso-Giachetti, PE, CHMM
Senior Engineer
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Client Success since 1989.

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

H&J Asphalt, Inc.
4310 N.W. 35th Avenue
Miami, Florida 33142

GLE Project No.: 14000-14251

Prepared for:

H&J Asphalt, Inc.
4310 N.W. 35th Avenue
Miami, Florida 33142

September 2014

Prepared by:

1000 NW 65th Street, Suite 100
Ft. Lauderdale, Florida 33309
954-968-6414 • Fax 954-968-6090

Spill Prevention Control and Countermeasure (SPCC) Plan

Prepared for:

H&J Asphalt, Inc.
4310 N.W. 35th Avenue
Miami, Florida 33142

GLE Project No.: 14000-14251

Draft Issue Date:
September 18, 2014

Lucas A. Barroso-Giachetti, PE
Florida License No. 68283

Signature

9/18/14
Date

Prepared by:
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1000 NW 65th Street, Suite 100
Fort Lauderdale, Florida 33309
Phone: (954) 968-6414
Fax: (954) 968-6090

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1.0. INTRODUCTION

1.1 Overview

Spill Prevention Control and Countermeasure Plan

Location:	H&J Asphalt, Inc. (H&J) 4310 N.W. 35th Avenue Miami, Miami-Dade County, Florida
Mailing Address:	4310 N.W. 35th Avenue Miami, Miami-Dade County, Florida

This Spill Prevention Control and Countermeasure Plan (SPCC Plan) has been prepared specifically for the above-referenced facility. Changes to the operations, equipment or procedures at the facility will require documentation and possible modifications in the Plan. **Table 1** summarizes the requirements of the plan.

1.2 Background Information

The United States Environmental Protection Agency (EPA) regulation defined by Code of Federal Regulations (CFR) Title 40, Part 112, promulgated under the authority of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA), is designed to ensure that facilities have planned for and taken measures to prevent environmental damage resulting from oil spills.

The objective of this SPCC Plan is to ensure compliance with EPA regulations, specifically: “to prevent harmful discharges of oil into or upon navigable waters of the United States of America, adjoining shorelines, and into or upon the waters of any contiguous zone.”

In accordance with CFR Title 40, Part 11, a SPCC Plan is specifically required for oil storage systems in which the aboveground storage tank (AST) capacity exceeds 1,320 gallons total or 550 gallons in a single container. The H&J facility has a total of 10,555 gallons of petroleum hydrocarbons stored in five (5) ASTs and one (1) 55-gallon drum for waste oil.

The H&J facility features office areas, asphalt product staging areas, one (1) vehicle maintenance and repair area, and an asphalt batch plant. The 180-ton per hour batch plant features a hopper, crusher, conveyor belts, and a diesel-powered engine to process recycled asphalt product (RAP).

This SPCC Plan addresses three primary issues:

- Operating procedures to prevent oil spills (specifically diesel fuel, motor oils (new and used, and hydraulic oil).
- Control measures installed to prevent any spill from reaching navigable waters.
- Countermeasures to contain, clean up, and mitigate the effects of any oil spill that could reach navigable waters.

1.3 Implementation and Commitment of Resources

Resources must be made available to implement this plan and the facility and organization management must enforce the plan for the plan to be effective. A form has been included (**Affidavit 1, FORMS**) for the facility manager to sign, accepting responsibility for implementing the plan.

1.4 Professional Engineer's Certification

This SPCC plan has been prepared in accordance with good engineering practices including applicable industry standards and in accordance with the requirements of Title 40 of the Code of Federal Regulations Part 112 (40 CFR 112). The procedures have been established for required inspections and testing; and the plan is adequate for the facility. A form has been included (**Affidavit 2, FORMS**) that the professional engineer has signed, accepting responsibility for the production of this plan.

1.5 Records to Have on File at the Facility

The most current SPCC Plan and SPCC-related records must be on file at this facility even though filing the SPCC Plan with the EPA is not required. If there is a significant release, then the SPCC Plan must be submitted to the EPA.

The SPCC Plan includes:

- SPCC Plan
- Inspection and monitoring logs and tank testing results
- Training records
- Documentation of spill reports
- Documentation of spill response and cleanup procedures
- Regulatory Agency correspondence
- Inventory of ASTs and USTs
- Written description of any spills
- Registration records for all in-service, temporarily out-of-service tanks or containers, and permanently closed tanks
- AST inspection records or integrity tests
- "Certification of the Applicability of the Substantial Harm Criteria Checklist"

1.6 Components of an SPCC Inspection

- Availability to facility, managers, and records
- Areas storing petroleum or non-petroleum oils
- Appropriate warning or caution signs
- Secondary containment structures
- Spill cleanup equipment
- ASTs and containers
- Fuel offloading areas
- Venting
- Fill pipes
- Vehicle maintenance area
- Tank gauges

1.7 SPCC Plan Requirements

- Explanation of Regulatory applicability (i.e., how this facility exceeds the SPCC Plan thresholds).
- Availability of facility for Regulatory inspection during normal working hours.
- Facility description including name, function, and drainage patterns.
- Facility diagram which indicates locations of oil storage and handling.
- Description of oil storage and handling areas.
- Analysis of potential spill scenarios including predictions of direction and rate of flow and total quantities of oil that could be released.
- Designation of SPCC responsibilities including designating a Spill Coordinator.
- Description of spill containment, drainage control structures, and equipment associated with oil storage and handling facilities.
- Description of spill emergency response equipment.
- Description of spill notification procedures including the reporting agency forms and numbers as applicable.
- Oil Spill Contingency Plan describing spill response and cleanup procedures including coordination with the facility, local authorities, and spill response contractors.
- Spill Prevention Plan including inspection and monitoring program, tank integrity testing procedures, preventive maintenance and housekeeping procedures, formal spill response training and exercises, and security measures.
- Review and update of procedures and documentation.
- Certification that a Substantial Harm Analysis has been conducted for the facility.

- SPCC Plan certification and Professional Engineer's Certification (Plan Renewal update and re-Certification every five years).
- Management approval for implementation and commitment of resources.
- The SPCC Plan is amended whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shore lines. Such amendments must be fully implemented as soon as possible but not later than six months after such change occurs. [40 CFR 112.5(a)].

1.8 Conformance with 40 CFR 112

Table 2 shows how this plan complies with the regulatory requirements for a plan.

1.9 Substantial Harm Determination

EPA has established more stringent spill prevention and Facility Response Plan (FRP) requirements for facilities that could be reasonably expected to cause "substantial harm" to the environment due to the type of transfer operation (e.g., over water), oil storage capacity, lack of secondary containment, proximity to fish and wildlife and sensitive environments, and drinking water supplies (40 CFR 112.20-21). There are two methods to establish "substantial harm":

- (1) Substantial Harm Analysis
- (2) EPA Regional Administrator Determination

Affidavit 3 in this SPCC Plan shows that this facility does not meet the substantial harm criteria [40 CFR 112 (App. C, 3.0)] so that an FRP Plan is not required. This form is not expected to require revisions unless there are major facility changes.

2.0 FACILITY DESCRIPTION AND CONTACT INFORMATION

2.1 Facility Owner, Address, and Phone Numbers

Table 3, has been provided as a quick reference of facility information that may be required during discussions with regulatory agencies.

2.2 Facility Contacts

Facility contacts, including internal and external contacts, are listed in **Appendix A**.

2.3 Facility Operations

The facility is located at 4310 N.W. 35th Avenue, Miami, Miami-Dade County, Florida.

The H&J facility in Miami, Florida, stores and handles Low/High Sulfur Diesel fuel, waste/used oil, hydraulic oil, and motor oil in ASTs. The petroleum products are used for facility vehicle fueling and maintenance activities. **Figure A-2** shows the approximate locations of the storage tanks, as well as the products contained, on site office and process buildings, and spill prevention and containment dikes and facilities.

H&J's intent is to conform to Federal and State regulations for the storage and use of the oil products located at the facility. The H&J facility operates the following ASTs, located within secondary containment dikes:

- One (1) 3,000-gallon single-wall steel tank, containing low-grade diesel fuel (Containment Dike #1a) – Tank #1.
- One (1) 5,000-gallon single-wall, steel tank, containing waste oil/used oil (Containment Dike #1b) – Tank #3.
- One (1) 2,000-gallon single-wall steel tank, containing high-grade diesel fuel (Containment Dike #1b) – Tank #2.
- Two (2) 250-gallon single wall, steel tanks, containing new motor oil (Tank #4) and hydraulic oil (Tank #5) (Containment Dike #2)

Photograph No. 1 – View of Containment Dikes #1a and #1b with diesel fuel ASTs and waste oil AST.

Containment Dike Spill Capacities

The following is a summary of the spill containment capacities for the three (3) facility concrete containment dikes:

- Containment Dike #1a area is approximately 8 feet by 14 feet by 3 feet high, with a capacity of approximately 336 cubic feet (2,513 gallons).
- Containment Dike #1b area is approximately 12 feet by 34 feet by 46 inches (3.83 feet) high, with a capacity of 1,563 cubic feet (11,689 gallons).
- Containment Dike #2 area is approximately 6.5 feet by 6.5 feet by 21 inches (1.75 feet) high, with a capacity of 74 cubic feet (553 gallons).

Photograph No. 2 – View of Containment Dike #2 with one (1) 250-gallon motor oil (left, Tank #4) and one (1) hydraulic oil (right, Tank #5) ASTs.

Only H&J associated vehicles are fueled on site. Vehicles are fueled exclusively by H&J employees. These employees have been trained in the fueling procedures, as well as usage of the emergency equipment, located near the tanks. Untrained employees are not permitted to fuel any vehicle.

Only H&J employees perform maintenance work and utilize bulk oil. Bulk oil is used only on H&J equipment. These employees have been trained in use containment procedures, as well as usage of the emergency equipment, located near the oil storage. Untrained employees are not permitted to use the bulk oil.

The containment system does not have a drain and any liquids must be pumped back into effluent tanks. All the tanks at the H&J facility are located in a contained area.

Prior to unloading any bulk tank trucks (fuel or waste oil), a bulk unloading form must be completed. This ensures that the tank level and all "hook ups" have been checked. One (1) H&J employee must remain near the tank truck during unloading. A facility layout plan, showing the AST location and drainage patterns, is provided for reference as **Figure A-2**. This site plan has not been prepared to scale.

2.4 Petroleum Products and Fuel Storage

Please see **Section 2.3** for petroleum products stored and fuel storage at the H&J facility.

Incidents noted, as described in FDEP regulations (Section 62-761.450(2) – p.22 in Appendix 3), shall be reported to Miami-Dade County Environmental Protection Division. The contact number for Miami-Dade County's Regulatory and Economic Resources (RER) department is (305) 372-6700.

Photograph No. 3 – View of ramp for waste oil disposal into 55-gallon drum.

2.5 Fuel Transfer Operations

Diesel fuel is transported to the facility by a licensed contracted fuel distributor, on an as-needed basis. Facility employees, which have been trained on the requirements of this SPCC Plan, will be present during fuel transfer operations, to ensure that corrective actions take place immediately, should a problem arise. The facility employees will verify that the transfer hoses are disengaged, truck outlets closed, and no leaks evident, before signing the receipt. Although not verified, GLE suggests that a 95% maximum fill capacity rule be implemented and followed at the Facility.

2.6 Facility Loading and Unloading Procedures

All products in containers 55-gallons or larger and bulk tank trucks to be loaded or unloaded require the completion of our *Bulk Loading/Unloading Form* to ensure that all procedures are met to minimize a release. Some of the requirements are as follows:

- Any hose connections that cannot be located inside a containment area require a bucket underneath to catch any drips and minor leaks.
- Truck wheels are chocked prior to loading or unloading, to prevent movement and the possibility of the driver leaving while still connected.
- Driver is required to stay next to the tank valve on his truck during unloading.
- Employees are required to check tank levels and driver hook ups prior to unloading.

2.7 Facility Topography, Surface Features and Drainage

A site vicinity (Aerial) map, for the facility location is provided, depicting surrounding properties, please refer to **Figure 1**. **Figure 2** depicts the structures, site features, AST locations and estimated drainage patterns.

The natural site topography is relatively flat, with a gradient slope toward the south and the two (2) on-site storm drains, located north of the asphalt plant and west of the main office. Stormwater flow direction is towards catch basins and generally to the south towards N.W. 35th Avenue.

As shown on **Figure 2**, stormwater flow in the AST area flows toward the stormwater catch basins (drains) and generally towards N.W. 35th Avenue. A spill at the ASTs is not likely to migrate from the AST storage areas due to the secondary containments.

However, a spill during fuel transfer operations could migrate into the stormwater catch basins referenced above. During fuel transfer activities, the stormwater drains may be closed and sealed with a rubber plug until transfer operations are completed. In addition, multiple spill kits, including oil absorbent materials and barriers will be maintained at the facility and made available during transfer activities.

2.8 Security

The H&J facility has perimeter fencing/gates that can be secured closed, if the facility is shut down. Security guards are present on- site periodically while the facility is closed to ride or walk through the facility.

In addition, lighting is present throughout the facility. These measures are utilized at the H&J facility to prevent vandalism.

3.0 POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

3.1 Raw Materials, Fuel Handling, and Spill History

Spill control equipment on-site includes absorbent pads and booms, granular absorbent, empty drums, brooms and shovels. Spill equipment is stored near the AST secondary containment areas and in the Repair Shop.

To prevent a tanker truck from leaving offloading areas before being completely disconnected from transfer lines, unloading procedures are required, including wheel blocks, posted signs, and supervision by qualified personnel.

All new hires are required to have spill prevention training, which includes a complete review of the H&J, SPCC Plan. Employees are also instructed and tested on the job. Once a year, refresher training and deployment exercises for spill response are conducted. During safety briefings, spill prevention is discussed. Any near misses or incidents are discussed in these briefings, in order to prevent them from reoccurring. Employee feedback and recommendations are encouraged in spill prevention and operation. Sign in sheets, which include the topics of discussion at each meeting, are maintained for documentation. H&J requires all drivers to comply with DOT regulations in 49 C.F.R. part 177 and facility standard operating procedures. All drivers must be authorized by H&J to unload product into the ASTs.

AST Piping for Tank #1, Tank #2, Tank #3, Tank #4, and Tank #5

The flow rate and volume of a spill would depend upon two variables: size of the leak opening and level of fuel in the tank, at the time of the leak. A spill caused by the complete failure of the diesel fuel AST Tank #1 and Tank #2 is not likely at the facility.

The following information is provided for the H&J facility ASTs:

- Tanks #1 through #5 are single-wall ASTs, that are located in concrete and/or concrete block secondary containments.
- Overspill buckets are located on the fill ports for these ASTs, to contain minimal spillage during filling operations.
- The tanks are manually gauged prior to delivery of fuel, to determine the volume of the fuel in the tank.

95% AST Capacity Rule

Although not verified, GLE suggests that the volume delivered is only the amount necessary to bring the tank to 95% capacity. The fuel delivery service driver/operator and a SPCC trained H&J representative will be present during loading activities to minimize the potential for a significant release.

The fill ports for Tank #1 and Tank #2 are securely capped/locked at all times. The AST piping runs are above ground between the ASTs and fuel dispensers, as applicable.

Spill control equipment on-site is contained a spill kit, which includes absorbent pads and booms, granular absorbent and empty drums.

Photograph No. 4 – View of Containment Dike #1b and 5,000-gallon waste oil AST.

Fuel Tanker Truck

A second possible source of a spill is from the tank truck servicing the AST. This spill could be caused by failure of the tank on the truck, failure of a valve, failure of a hose, or an operator error, allowing overfilling of the tank. The maximum spill possible from this source would be the capacity of the tank truck. The release would travel topographically towards the storm drains, located in the delivery truck area and to the west, towards the parking lot storm drains. The flow rate from such a spill would vary, depending upon the nature of the failure, from a slow trickle, to maximum discharge of the truck's entire load.

A trained facility employee will be present during fuel transfer operations to ensure immediate action should a problem arise. The maximum spill would be the capacity of the tanker delivery.

3.2 Drainage Pathway and Distance to Navigable Waters

A spill release from the AST Tanks: Tank #1, Tank #2, Tank #3, Tank #4 and/or Tank #5, caused by an external puncture through the tank walls , should be contained inside the containment walls. The drainage pathways follow the topography of the land surface, which slopes toward the southern portion of the Property. Most spills will generally migrate toward the storm drains, located in the parking lot areas and N.W. 35th Avenue. The stormwater would then discharge to an off-site drainage ditch, which will eventually discharge to Canal No. C6, the nearest navigable surface water, located approximately 3,500-feet southwest of the H&J facility. A topographic map of the site conditions is shown in **Figure A-3**.

3.3 Spill Prediction Data

Table 5 presents the most likely spill scenarios, based upon the location of AST Tank #1, Tank #2, Tank #3, Tank #4, and Tank #5.

3.4 Maintenance and Preventative Maintenance

Work orders are prepared for maintenance work for equipment and upgrades to the AST systems, on an as needed basis. A licensed petroleum storage system contractor is contracted, as needed, for the periodic maintenance of the ASTs associated with this facility.

3.5 Release Volume and Containment Volume Calculations

The release volumes are estimated as follows:

- Entire contents of the fuel/oil ASTs (maximum of 10,500 gallons of vehicular diesel fuel and motor/hyradulic/used oil), could potentially release from the secondary containment, if not identified and terminated. Any release not contained in the area of Tanks #1, Tank #2, Tank #3, Tank #4 and Tank #5 could readily flow across the gravel surface and/or asphalt pavement, to the south, towards open ground, stormwater catch basins, and eventually impacting N.W. 35th Avenue.
- During offloading from a tanker with a burst hose, approximately 7 gallons per minute may release onto pavement. Based on a 10 minute release or spill time, a 70-gallon spill is possible.
- Fuel transfer from ASTs, approximate 0.3-3 gallons per minute will release into a secondary containment area or onto pavement, depending on where the leak occurs (178 gal/hr = 2.97 gal/min and 18.3 gal/hr = 0.3 gal/min) Based on a 120 minute release or spill time, then a 36-gallon spill is possible. Typically, these releases are not always observed quickly, so that the total release could be a substantial volume before spill discovery. The maximum fuel service delivery to

the facility would depend on the quantity of the fuel requested by the H&J for delivery and/or the capacity of the delivery truck.

4.0 SPILL PREVENTION AND CONTROL MEASURES

4.1 Fuel Storage Areas & Containers

A representative of the H&J facility must observe all diesel fuel transfers, to ensure that proper procedures are followed, and to ensure that corrective action is taken immediately, if a mishap does occur.

In the event of a large spill at Tank # l or Tank #2, from the AST or the tanker truck, the fuel would flow following topography to the south, across pervious and impervious surfaces. A spill from fuel transfer operations could migrate towards facility soils.

During fuel transfer activities, the storm drains should be closed and sealed with a rubber plug, until transfer operations are complete.

In addition, a spill kit, including oil absorbent materials and barriers, will be maintained at the facility and made available during transfer activities. The spilled material should be recovered as quickly and as completely as possible. **Table 6** includes the safety devices such as adsorbents and booms that must be readily accessible to limit the potential for spill incidents to affect surface water.

4.2 Drainage Control

A spill kit, including oil absorbent materials and barriers, will be maintained at the facility and made available during transfer activities. Based on site observations, a petroleum release from Tanks #1 through #5 would pool in the AST containment dike areas. A significant release would likely migrate to the south, following topography.

4.3 Inspection and Record Keeping

Facility inspection procedures: Formal facility inspections are conducted weekly and records of these inspections are documented and signed by the inspector or facility manager. During the weekly inspections, all tanks, containment structures, valves, pipelines and other equipment are inspected. Length of time records maintained: Inspection, training and tank integrity testing records are retained for a minimum of three years or the life of the tank, depending on the type of record, as described in FDEP regulations in 62-761.710 in **Appendix F**. Recordkeeping must comply with FDEP requirements listed in **Appendix G**. The checklists used by this facility for these inspections can be found in **Appendix C**.

Inspection, training, and tank integrity testing records are retained for a minimum of five years or the life of the tank, depending on the type of record as described in FDEP Regulations in **Appendix G**

Forms and Test Schedule

Applicable forms are located in **Appendix E**.

Annual Checklist

At the end of each year, the facility's operations will be reviewed. Any spill experienced during the year will be noted and described. Adequacy of this SPCC Plan will be noted, based on actual spill experiences, including comments. It will be noted whether or not all required inspections and training program have been implemented. The facility system will be checked for visible signs of deterioration, which would be indicated on the checklist form. The Annual Checklist Form is in **Appendix C**.

4.4 Personnel Training & Spill Prevention Procedures

Selected personnel are required to have spill prevention training which includes (a) a complete review of the SPCC Plan and (b) hands-on training by supervisors.

This group will be referred to as the Emergency Response Team (ERT). All new hires are required to have spill prevention training, which includes a complete review of the H&J, SPCC Plan. Once per year, refresher training and deployment exercises for spill response will be conducted. Since this facility has limited personnel available to supervise the offloading of fuels, cross-training of selected other employees will be performed.

Once this SPCC Plan is implemented, an employee training session will be held to familiarize all designated personnel with the Federal EPA requirements pertaining to this particular facility. All designated personnel will be instructed on this SPCC Plan, and the use of materials and equipment, to prevent and control spills. New designated employees assigned to these duties will be given this same training when assigned to the facility.

Thereafter, periodic briefings will be held, at least annually, to maintain designated employee proficiency in spill prevention, control, and countermeasures. Also, these briefings will update the SPCC Plan, by incorporating recently developed precautionary measures and discussing any recent experiences with spills or near spills.

The respective manager for each facility, who has the responsibility for organizing the initial training session and periodic briefings, will see that records are maintained concerning training sessions, schedule, and attendance.

When a spill incident occurs or nearly occurs, a safety meeting will be conducted with all designated personnel. Employee feedback and recommendations are encouraged in spill prevention and operation meetings. Sign-in sheets, which include topics of discussion at each meeting, are to be maintained for documentation.

Personnel and training requirements listed at 40 CFR 112.7 are as follows:

1. Facilities are responsible for proper instruction of personnel in the operation and maintenance of equipment to prevent discharges of oil and to adhere to applicable pollution control laws, rules, and regulations.
2. The H&J Asphalt Facility must have a designated person accountable for oil spill prevention, who reports to line management.
3. Facilities must conduct spill prevention briefings for their operating personnel often enough to ensure adequate understanding of the SPCC Plan for the facility.
4. Such briefings should highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures.
5. Training must cover all aspects of the SPCC Plan. A training session includes classroom as well as field exercises.
6. Duration for the training should be appropriate to the complexity of the facility.
7. Training should be conducted for all new personnel involved in petroleum handling operations and whenever operations change significantly.
8. Refresher training should be conducted at least once annually.

5.0 EMERGENCY INFORMATION

5.1 Emergency Response Procedures

Steps to take in any emergency response to a spill:

1. Notify management of the spill immediately.
2. Assess the situation, determine spill severity, determine facility corrective action, or determine if outside contractor assistance is required.
3. Contain any spill by placing barriers to prevent migration of any spill.
4. Prevent spill from entering any stormwater inlet or drainage ditch.
5. Notify local agencies for support – fire department, etc.
6. Notify regulatory agencies by telephone.
7. Prepare a spill incident report.
8. Complete written notification to Regulatory agencies.

5.2 Emergency Contacts

FIRST NOTIFICATION: ANY PERSON DISCOVERING A SPILL SHALL IMMEDIATELY REPORT THE SPILL TO ONE OF THE DESIGNATED H&J ASPHALT FACILITY PERSONNEL IN THE LISTED ORDER OF PRIORITY (SEE 5.3). THEN THE PERSON CONTACTED WILL COORDINATE THE APPROPRIATE RESPONSE AND NOTIFY THE ENVIRONMENTAL SUPPORT TEAM AFFILIATED WITH THE H&J FACILITY.

See **Appendix A** for contact names and telephone numbers.

IN AN EXTREME OR UNCONTROLLABLE EMERGENCY, CALL THE FOLLOWING EMERGENCY RESPONDER:

Fire Department	**911**
Ambulance	**911**
Police	**911**

5.3 Management and Immediate Agency Notifications

The Environmental Manager, Mr. Marvin Mondragon, will direct all steps to address the spill, making the necessary notifications and initiating cleanup activities.

For cleanup assistance, call:

- Mr. Marvin Mondragon - Phone Number: 305-609-3013
- SWS Environmental Services - 877-742-4215
- GLE Associates, Inc., Fort Lauderdale, FL
  Day: 954-968-6414 (leave message on voicemail after normal working hours)
  Night: 786-877-4363 (Lucas Barroso-Giachetti)

Immediately report a spill of 25 gallons or larger or any size spill that comes into contact with water/drainage system to:

- The National Response Center (24-hour)
  800-424-8802

Notify the following local government agencies (as applicable):

- Miami-Dade County Fire Department
  Dial 911

- Miami-Dade County Department of Regulatory and Economic Resources (RER)
  (305) 372-6700

- Florida Department of Environmental Protection – Southeast District
  (561) 681-6600

- FDEP State Warning Point
  (800) 320-0519

6.0 SPILL COUNTERMEASURES AND CLEANUP

6.1 Explanation of Spill Reporting Procedures

The Spill Reporting Procedures and Emergency Contacts, as listed in Section 5.1 and 5.2, will be posted at highly visible locations.

Federal Regulation 40 CFR Part 100 prohibits discharges of oil into waters in harmful quantities which:

- Violate applicable water quality standards in navigable waters of the United States, or

- Cause a film or sheen upon or discoloration of the surface waters or adjoining shore-lines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

A spill event, which is a discharge, as defined above, must be reported to the U.S. Government, since Public Laws 92-500 and 96-510 require immediate notification of the appropriate agency of the United States Government of discharge of oil or hazardous substances. According to the law, "Any such person who fails to notify immediately such agency of such discharge shall, upon conviction, be fined not more than $10,000 or imprisoned for not more than one year, or both."

The following information must be reported to the National Response Center at the telephone number indicated on the Reporting Procedures:

1. Name, address and telephone number of person reporting
2. Exact location of spill
3. Company name and location
4. Material spilled
5. Estimated quantity
6. Source of spill
7. Cause of spill
8. Name of body of water involved

9. Name of nearest body of water to the spill area
10. Action taken for containment and clean-up

Table 8 is an example of information needed and typical information that should be included in a notification to a Regulatory agency. **Appendix D** includes the forms to be utilized. The **Discharge Reporting Form (DRF)** must be used to report any confirmed discharge. The **Incident Notification Form (INF)** must be completed to notify the FDEP of all incidents, or of a suspected release.

6.2 Spill Control Equipment

To meet the requirements of 40 CFR 112.7(c), a list should be posted of all facility spill control equipment and its exact location. Spill control equipment should consist of:

1. Mobile emergency spill cart
2. Gloves
3. Absorbent pillows, socks, booms, and pads
4. Absorbent cloths
5. Sorbents or granular adsorbents
6. Brooms
7. Shovels
8. Disposal bags
9. Empty drums to store spill materials

Replenishing and maintaining the emergency supplies, is the responsibility of personnel designated by the facility manager.

6.3 Cleanup Instructions

Cleanup of a spill, whatever its nature, should begin concurrently with the reporting procedures presented in Sections 5 and 6.1. Cleanup procedures will vary with each spill event, based on the material (type and amount) spilled, location of the spill, and whether on soil or pavement. The following description is offered as a guide, clarifying procedures common to most spill events. A “spill event” is categorized as either “minor” or “major”, in terms of quantity of petroleum hydrocarbon or material discharged. A minor spill is confined to the area in the immediate vicinity of the source of discharge and does not flow into other areas, such as onto the street or ground. A minor spill would be containable and contained by H&J Asphalt Facility personnel without outside assistance.

<u>For cleanup of a minor spill (includes any spilled material):</u>

1. Perform any required neutralization for any chemical spill.
2. Place adsorbent material on and around the spilled material. Cut or tear off as much material as needed.
3. Allow adsorbent material to adsorb the material.

4. Place the used adsorbent material in a leak-proof 55-gallon container with a label identifying contents.
5. Soil should be observed for contamination and minor spills should be evaluated to determine if additional remediation should be necessary.
6. The facility manager should arrange for a cleanup assistance firm to haul the waste to an approved State of Florida disposal location.

For cleanup of a major spill (includes any spilled material):

1. Contain the spill, if possible, by shutting off valves, turning off transfer pump, and/or positioning transfer hose inside secondary containment.
2. Immediately notify **H&J** facility management, so that the appropriate regulatory and cleanup response can be initiated. Refer to 5.3.1.
3. If total cleanup is beyond the capabilities of **H&J** personnel, a contracting firm will be called in for assistance in accordance with the reporting procedures in Section 5.
4. Coordinate cleanup efforts with a contracting firm.

7.0 DEFINITIONS

Definitions are provided in **Table 9,** for terms that may be unfamiliar.

TABLES

Table 1. Overview		
Plan Section	**Summary**	**Requirements of This Plan**
1. Introduction, Background Information, and Overview	SPCC Plan requirements Style and format of this Plan P.E. Certification Management Certification	**ALL CHANGES** must be recorded as updates to this Plan with a record of minor changes. **ANY TECHNICAL CHANGE** requires Professional Engineer recertification. **ADMINISTRATIVE CHANGES** do not require Professional Engineer review.
2. Facility Description and Contact Information	Facility operation Facility owner & operator Facility contacts Fuel and raw materials storage and handling procedures	**ALL CHANGES** must be recorded as updates to this Plan.
3. Potential Spill Predictions, Volumes, Rates, and Control	Spill history Table with spill potential and environmental impact details Maintenance and preventative maintenance	**ALL CHANGES** must be recorded as updates to this Plan.
4. Spill Prevention and Control Measures	Site controls Inspections, tests, and forms Oil and raw materials transfer procedures Training	**ANNUAL TRAINING** is required for personnel. **ANY STORMWATER RELEASE FROM CONTAINMENT** needs to be visually observed or tested for fuel **NEW HIRES** require training.
5. Spill Prevention Countermeasures	Emergency organization Response procedures Recordkeeping requirements Notification requirements	**ALL CHANGES** require updating of this Plan **ALL SPILLS** should be reported to management and reported to local, State, and other agencies
6. Corrective Actions	Cleanup Instructions	**ALL FACILITY CHANGES** require an update to this Plan
7. Definitions		
TABLES FIGURES FORMS APPENDICES		

Table 2. Conformance with 40 CFR 112		
REGULATION SECTION	**REQUIREMENTS**	**LOCATION IN DOCUMENT**
112.7	Full approval of management at level of authority to commit necessary resources	Section 1
112.7(a)(1) 112.7(a)(2)	Demonstrate Plan conforms with 40 CFR Part 112	Section 1
112.7(a)(3)	Describe physical layout of the facility and facility diagram	Section 2
112.7(a)(3)(i)	Type of oil in each container	Section 3,4
112.7(a)(3)(ii)	Discharge prevention measures and procedures	Section 3,4
112.7(a)(3)(iii)	Discharge and drainage controls: secondary containment, other containment structures, equipment, and procedures	Section 3,4
112.7(a)(3)(iv)	Countermeasures for discharge discovery, response, and cleanup	Section 4,5,6
112.7(a)(3)(v)	Methods of disposal of recovered materials	Section 6
112.7(a)(3)(vi)	Contact list and phone numbers	Section 5
112.7(a)(4)	Discharge reporting requirements	Section 1,6
112.7(b)	Potential for equipment failure (including list of spills)	Section 3,4
112.7(c)	Containment and diversionary structures	Section 3,4
112.7(e)	Inspections, tests, and records	Section 1,4
112.7(f)	Personnel, training, and discharge prevention procedures	Section 4
112.7(g)	Security	Section 2
112.7(h)	Tank truck loading rack	Not applicable

Table 3. Facility Information

Facility Name	H&J Asphalt, Inc. – Miami Facility 4310 NW 35th Avenue, Miami, Florida
Manned or Unmanned Facility	Manned Facility
Telephone Number (If Manned Facility)	(305) 609-3013, contact Mr. Marvin Mondragon
Physical Address and Directions	4310 NW 35th Avenue, Miami, Miami-Dade County, Florida Take N.W. 62nd Street west to N.W. 27th Avenue (Unity Boulevard) and take a left going south. Heading south on N.W. 27th Avenue and take a right heading west on N.W. 46th Street. Take a left onto N.W. 35th Avenue and enter facility on your right hand side.
Latitude & Longitude	28° 48' 54.67" N 80° 15' 10.97" W
Facility ID Number	Miami-Dade County IW5-4060 ASTs at Facility: Tank #1, One (1) Approximate 3,000-gallon Vehicular Low-Sulfur Diesel Fuel AST Tank #2, One (1) Approximate 2,000-gallon Vehicular High-Sulfur Diesel Fuel AST Tank #3, One (1) Approximate 5,000-gallon Used/Waste Motor Oil AST Tank #4, One (1) Approximate 250-gallon Motor Oil AST Tank #5, One (1) Approximate 250-gallon Hydraulic Oil AST
Owner/Operator Name	H&J Asphalt, Inc. 4310 NW 35th Avenue, Miami, Miami-Dade County, Florida
Key Contact Name & Title, Phone Number	Mr. Marvin Mondragon, Manager (305) 609-3013

Table 4. Aboveground Storage Tanks				
TANK DESCRIPTION	**DIMENSIONS OF CONTAINMENT**	**VOLUME IN GALLONS**	**CONTENTS**	**SECONDARY CONTAINMENT**
Tank #1	8 feet by 14 feet by 36 inches high	3,000	Low-Sulfur Diesel Fuel	Yes
Tank #2	12 feet by 34 feet by 46 inches high	2,000	High Sulfur Diesel Fuel	Yes
Tank #3		5,000	Waste/Used Oil	Yes
Tank #4	6.5 feet by 6.5 feet by 21 inches high	250	Motor Oil	Yes
Tank #5			Hydraulic Oil	Yes
		TOTAL = 10,500 Gallons		

Table 5. Spill Prediction Data			
Type of Failure	**Direction of Flow**	**Quantity**	**Collection Point**
Tank #1 AST- Breach of Fuel AST or rupture/leak of steel tank.	Spill would stay in the containment dike. Visual Indicator in the event of a release.	Maximum 2,850 gallons of vehicular diesel fuel with the 95% Capacity Rule in effect	100% containment since the tank is located within secondary containment dike No. 1a (2,513 gallon capacity.
Tanks #2 and #3 AST- Breach of Fuel AST or rupture/leak of steel tank.	Spill would stay in the containment dike. Visual Indicator in the event of a release.	Maximum of 1,900 gallons of vehicular diesel fuel and 4,750 gallons of waste oil with the 95% Capacity Rule in effect	100% containment since the tanks are located within secondary containment dike No. 1b (11,689 gallon capacity).
Tanks #4 and #5 AST- Breach of Fuel AST or rupture/leak of steel tank.	Spill would stay in the containment dike. Visual Indicator in the event of a release.	Maximum of 237 gallons of motor oil and 237 gallons of hydraulic oil with the 95% Capacity Rule in effect	100% containment since the tanks are located within secondary containment dike No. 2 (553 gallon capacity).

Table 6. Safety Devices		
Device	**Purpose**	**Location**
Fuel Line Shutoff Valve	Stops flow of fuel from tank.	There are no shutoff devices utilized at this facility.
Absorbent Material	Cleanup oil spill	Adjacent Containment Dikes Nos. 1 and 2 and within the Repair Shop.
Inventory/Leak Detection System	Detect possible leak	Fuel level is manually measured.
Tank Overfill Alarm	Prevent tank overfill	There are no alarms (audible or visual) in use at this facility.

TABLE 7. STORAGE SYSTEMS INSPECTIONS H&J Asphalt Facility, Miami, Florida			
INSPECTION	**TEST SCHEDULE**	**RECORDED**	**INSPECTOR**
Routine visual inspections for damage control.	Weekly	No	Facility employee
Weekly visual overall inspection of the ASTs storage areas.	Weekly	Yes	Facility employee
Visual check for storm damage after each severe storm event.	After each storm	Yes	Facility employee
Weekly inspection of ASTs for visible leaks.	Weekly	Yes	Facility employee
Weekly inspection of interstitial level gauge.	Weekly	Yes	Facility employee
Visual inspection of piping integrity Tank #1 and Tank #2 ASTs.	Weekly	Yes	Facility employee
Spill prevention devices	Every Four Weeks	Yes	Facility employee
Annual Inspection and Operability Test of ASTs and Fuel System	Annually	Yes	Facility employee

Inspections conducted for Tank #1, Tank #2, Tank #3, Tank #4 and Tank #5.

Table 8. Example of Information Required for Outside Notifications		
ITEM #	**INFORMATION REQUIRED**	**EXAMPLE OF TYPICAL RESPONSE**
1	Name, address, and phone number of the person making the telephone notification or report.	Mr. Marvin Mondragon, Technician. Location: H&J Asphalt, Inc., 4310 N.W. 35th Avenue, Miami, Florida 33412, Onsite Contact Number: (305) 634-3342 (office) (305) 609-3013 (cell)
2	The date, time, and location of the spill, release, or discharge.	(Tank #1, Tank #2, Tank #3, Tank #4 and Tank #5) Spill of diesel fuel or motor/hydraulic oil at the fuel tank during re-fueling activities. Spill of diesel fuel pooled in the area of the ASTs and impacted surrounding soils.
3	Specific description / identification of the oil, petroleum product, or other substances discharged, released, or spilled.	Diesel fuel or motor oil spilled from breached tank onto pervious surfaces at Tank #1, Tank #2, Tank #3, Tank #4, and Tank #5.
4	An estimate of the quantity discharged, released, or spilled.	Majority of fuel in ASTs were below the breach in the tank. Estimated at less than 25 gallons released.
5	The duration of the incident.	Only a few minutes before the fueling activity was terminated.
6	The name of the surface water or a description of the waters in the State affected or threatened by the discharge, release, or spill.	None anticipated. Majority of the fuel contained at the AST location or on native soils.
7	The source of the discharge, release, spill.	On-site – Aboveground Storage Tank. Or Delivery Truck
8	A description of the extent of actual, potential water pollution, or harmful impacts to the environment, and an identification of environmentally sensitive areas or natural resources at risk.	Majority of spill still contained on H&J Asphalt property at the AST location or area adjacent to the containment dike. Spill may impact the storm water drainage system.
9	Applicable names, addresses, and phone numbers of responsible persons and contact persons at location.	See Item #1 above.
10	A description of actions that were taken, are being taken, will be taken to contain or deal with the discharge, release, or spill.	Barriers in path of spill. Adsorbents on spill. Testing will be conducted of soil, groundwater and/or surface water that may have been impacted.
11	Any unknown or anticipated health risks.	Not anticipated.
12	The identity of any governmental representatives, including local authorities or third parties, responding to the discharge, release, or spill.	No third party on site and none expected.
13	Any other information that may be significant to a response action.	No evacuation is necessary. No additional information is available.

Table 9. Definitions	
TERM	**DEFINITION**
Applicable Water Quality Standards	The applicable State water quality standards adopted by the State of Florida and approved or promulgated by EPA under Section 303 of the Clean Water Act.
AST	An aboveground storage tank is a storage vessel with a foundation on the land surface. This storage tank can be a horizontal or vertical vessel. It can also be a sump that is partially embedded in soil.
BLEVE	Acronym for Boiling Liquid Expanding Vapor Explosion
CFR	The Code of Federal Register is a government document that provides details of daily governmental regulations.
Confined Entry Permit	A permitted standard operating procedure defined by OSHA as entry into an oxygen deficient atmosphere such as storage tank. Breathing apparatus, safety harnesses, and a buddy system are typically required for this work safety procedure.
Deadman System	A deadman hand-control switch system using low voltage is used for offloading or loading fuel trucks by controlling the fuel transfer pump and any electric actuated valve. The electrical control circuit is interlocked with the auxiliary contact in the transfer pump motor starter.
De Minimus Oil Storage and Exclusions	This SPCC plan addresses containers capable of containing 55-gallons or more.
Discharges of Oil Reasonably Expected to Reach Navigable Waters	Oil discharges can reach navigable waters via storm sewers, drainage swales, or other means of conveyance as well as direct discharge via sheet flow. Discharges to groundwater that are hydraulically connected to navigable water.
Emergency Response Personnel	Trained environmental response/spill cleanup personnel with experience with personal protective gear and certified by OSHA 29 CFR 1910.
Environmental Manager	The Environmental Manager is responsible for management of the SPCC Plan for this facility.
Facility = Site	“Facility” is defined as either mobile or fixed-onshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations (excluding offshore), oil production, oil refining, oil storage, or waste treatment.

TERM	DEFINITION
Haz Mat	Acronym for Hazard Materials usually referred to as a team trained to operate in a hazardous environment.
Harmful Quantities of Oil	Discharges of oil that violate applicable water quality standards or cause a film or sheen upon, or discoloration of the water surface of water, or affect local shorelines.
Hot Work Permit	A permitted standard operating procedure defined by OSHA designed to minimize ignition sources, flame, or spark-producing tasks involved with cutting, burning, or welding operations.
Lockout or Tagout	A health and safety standard operating procedure designed to prevent the electrical startup of equipment by placing a lock on the starter to prevent the operation of that piece of equipment while operations or maintenance personnel are working on or inside it.
MSDS "Sheets"	A Material Safety Data Sheet is a detailed information bulletin prepared by the manufacturer of a chemical that describes the physical and chemical properties, physical and chemical hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures. For checking any chemical safety properties, MSDS "sheets" are typically found in notebook binders, on a CD disk, or on a computer.
Navigable Waters of the U.S.	All waters used in the past, currently used, or susceptible to use, in interstate or foreign commerce, including all waters subject to tidal influence. Also included are interstate waters and wetlands and all other waters such as lakes, rivers, streams, mudflats, sandflats, intermittent streams, and wet meadows. Storm sewers that are tributaries to any of these water bodies are also included under the definition of "navigable waters."
Oil = Petroleum Hydrocarbons	Oil or oil products of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse, oil mixed with wastes, and spent crankcase or lubricating oil. Crude oil, vegetable oil, and animal oils are included.
Oil Spill	The discharge of harmful quantities of oil into navigable waters of the United States.
Operator	The operator of this facility, the person designated as the local operator facility manager or another appointed person in charge of operating the facility.
Pollution Prevention Plan	A generic report that addresses the reduction of contamination to the environment. SPCC Plans are specific examples of this generic report.

TERM	DEFINITION
Sheen	The iridescent appearance on a water surface.
Sheet Flow	A spill or rainfall running down a pavement or grass as a sheet of oil or stormwater runoff.
Sludge	An aggregate of oil or oil plus other matter of any form other than dredged soil or spoil having a combined specific gravity equivalent to or greater than water.
Spalling	Concrete failures involving pieces of concrete separating from the surface of a concrete slab or wall.
SPCC	Spill Prevention Control and Countermeasure, as described in CFR 40 112.
Sump	An open-top pit that falls between the definition of an aboveground and underground storage tank. Sumps fall into the category of underground storage vessels.
Surficial Aquifer	The uppermost groundwater unit of multiple hydrostatigraphic units. The groundwater surface is usually referred to as the local water table.
UST	Underground storage tank.

FIGURES

Figure 1: Site Vicinity Map
H&J Asphalt
Miami, Florida

Scale – N.T.S.

Prepared By: GLE Associates, Inc.
1000 NW 65th Street, Suite 100
Fort Lauderdale, Florida (954) 968-6414

GLE
ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

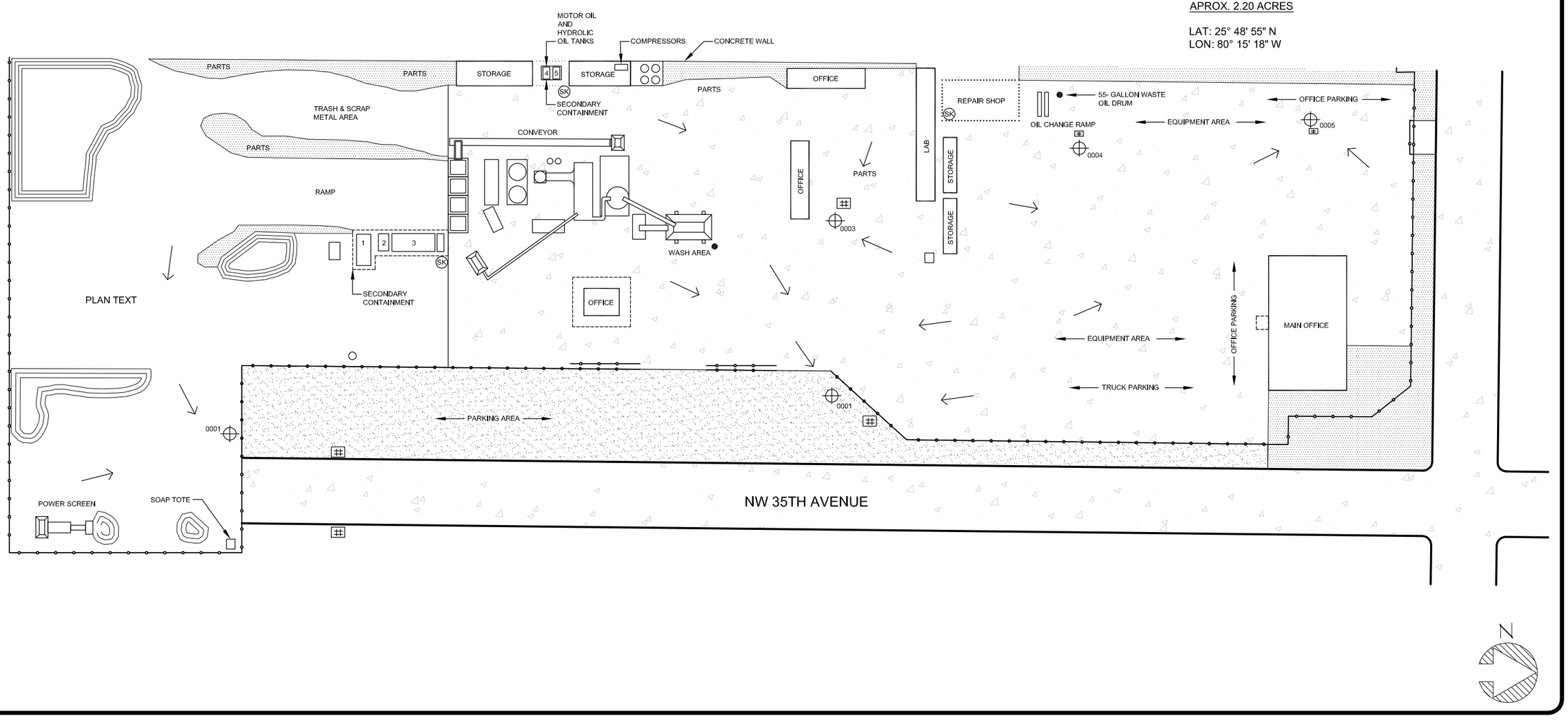
H&J Asphalt Miami, Florida	
Drawn: LBG	Job No.: 14000-14251
Checked: LBG	Figure: A-1
Date: 8/29/14	

LEGEND	
→	STORM WATER RUNOFF (ESTIMATED)
⊕	REPRESENTATIVE SAMPLING STORM WATER OUTFALL 0001
⊕	REPRESENTATIVE SAMPLING STORM WATER OUTFALL 0002
⊕	NON SAMPLING SUBSTANTIALLY SIMILAR OUTFALL 0003
⊕	NON SAMPLING SUBSTANTIALLY SIMILAR OUTFALL 0004
⊕	NON SAMPLING SUBSTANTIALLY SIMILAR OUTFALL 0005
	FENCE
	ASPHALT
	GRASS
	GRAVEL
	DUMPSTER
	DRAIN
	TIRES
	DRUM
	BIN
	SHED ROOF
	MIXER
	GRAVEL PILE
	SILO
1	ABOVE GROUND STORAGE TANK
SK	SPILL KIT

SUMMARY OF SITE ASTs			
TANK ID	CAPACITY (GAL.)	CONTENTS	SECONDARY CONT.
1	3,000	DIESEL	YES
2	2,000	DIESEL	YES
3	5,000	USED OIL/ WASTE OIL	YES
4	250	MOTOR OIL	YES
5	250	HYD. OIL	YES

APROX. 2.20 ACRES

LAT: 25° 48' 55" N
LON: 80° 15' 18" W



REVISIONS	BY

GLE
ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

Prepared By: GLE ASSOCIATES, INC.
4300 W CYPRESS ST, STE 400
TAMPA, FLORIDA 33607
(813) 241-8350 (813) 241-8737

SITE PLAN

H & J ASPHALT

4310 NW 35TH AVENUE
MIAMI, FL

DRAWN	DR
CHECKED	LPG
DATE	08/29/2014
JOB NO.	14000-14251
SCALE	N.T.S.
GLE CAD NO.	14000-14251
SHEET	A-2
OF 1 SHEET(S)	

N

Figure 3: Topographic Map

H&J Asphalt
Miami, Florida

Scale – N.T.S.

Prepared By: GLE Associates, Inc.
1000 NW 65th Street, Suite 100
Fort Lauderdale, Florida (954) 968-6414

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ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

H&J Asphalt Miami, Florida	
Drawn: LBG	Job No.: 14000-14256
Checked: LBG	Figure: A-3
Date: 8/29/14	

FORMS

Affidavit 1. Implementation and Commitment of Resources

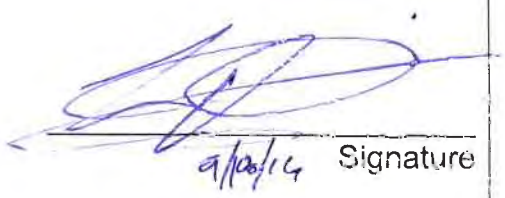
An SPCC Plan must be implemented fully for full effectiveness. This SPCC Plan specifies that spill containment and emergency response equipment must be installed and maintained. Spill response coordination must be conducted with contractors and local authorities. Training and spill response exercises must be conducted periodically. Inspection, monitoring, tank integrity testing, and preventive maintenance programs must occur.

This Plan shall be implemented upon signing below. Implementation shall mean that the labor and resources necessary to prevent, control, and counteract the effects of spills or discharges of oil or oil products in order to minimize hazards to human health and the environment shall be provided.

	I am at a management level with authority to commit the resources necessary to implement this SPCC Plan and hereby approve it. _____ Signature _____ (Print) _____ Title _____ Date

Affidavit 2. Professional Engineer's Certification

The undersigned Registered Professional Engineer is familiar with the requirements of Title 40 of the Code of Federal Regulations Part 112 (40 CFR 112) and has supervised examination of the facility. The undersigned Registered Professional Engineer attests: that this Oil Spill Prevention Control and Countermeasure Plan has been prepared in accordance with good engineering practices including applicable industry standards and in accordance with the requirements of Title 40 of the Code of Federal Regulations Part 112 (40 CFR 112); that procedures have been established for required inspections and testing; and that the Plan is adequate for the facility.



9/18/14 Signature

Lucas A. Barroso-Giachetti, P. E.
Printed Name

P.E. 68283
State of Florida License Number

9/18/14
Date

Affidavit 3. Certification Regarding Substantial Harm Criteria		
	YES	**NO**
Does the facility transfer oil over water to or from vessels, and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?		NO
Does the facility have a total oil storage capacity greater than or equal to one million gallons, and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?		NO
Does the facility have a total oil storage capacity greater than or equal to one million gallons, and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from this facility could cause injury to fish, wildlife, and sensitive environments? For further description of fish, 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."		NO
Does this facility have a total oil storage capacity greater or equal to one million gallons, and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III in the appendix in that document or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?		NO
Does this facility have a total oil storage capacity greater than one million gallons, and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?		NO

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

_____ Signature	_____ Title
_____ Printed Name	_____ Date

APPENDIX A
Emergency Contacts

EMERGENCY CONTACTS

INTERNAL CONTACTS

Any employee discovering an emergency involving a spill or potential spill of hazardous materials must report it immediately to his supervisor or an emergency coordinator listed below.

H&J Asphalt, Inc. Miami, Florida EMERGENCY RESPONSE COORDINATOR		
NAME	**TITLE**	**INFORMATION**
Mr. Marvin Mondragon	Environemntal Manager	305-634-3342 – office 305-609-3013 – mobile phone 305-634-3313 - fax

This is a manned facility. H&J Asphalt, Inc. staff will be onsite for all fuel delivery and transfer activities. This individual will locate and report any emergency to Emergency Response Coordinator, as necessary.

EXTERNAL CONTACTS

In case of a spill, notify the following agencies, as required.

AGENCY CONTACT LIST	NUMBER
City of Miami Department of Fire-Rescue Miami-Dade County Fire Department Miami-Dade County RER	305-416-5400 786-331-5000 (911) 305-372-6700
Local EMS – City of Miami Fire-Rescue	305-416-5400 (911)
Hazardous Materials (HazMat) Team	911
City of Miami Police Department	305-603-6640 (911)
24-HR Emergency Contractor (SWS Environmental Services)	877-742-4215
LEPC	954-985-4416
FDEP State Warning Point	800-320-0519
Florida Department of Environmental Protection (FDEP)	(561) 681-6600
U.S. EPA National Response Center	800-424-8802

APPENDIX B
SPCC Plan Training Log
and
SPCC Plan Revision Log

H&J Asphalt, Inc.
Miami, Florida
SPCC PLAN Training Log

Staff Member	Date	Staff Member I.D. Number	Signature of H&J Staff Member SPCC Plan Reviewed

H&J Asphalt, Inc., Miami, Florida
REVISION LOG TO SPCC PLAN

Revision Number	Date	Page or Appendix Affected	Reason for Revision

APPENDIX C
Checklists

CHECKLIST

H&J ASPHALT, INC, ANNUAL CHECKLIST

FROM _____ TO _____

A.	Have any spills occurred in the last 12 months?	Yes	_____	No	_____
	1. Date:				
	2. Description:	Yes		No	
	3. Was the SPCC Plan satisfactory?		_____		_____
	4. Comments:				
B.	Have weekly inspections been performed regularly?	Yes	_____	No	_____
	Documentation available at facility?	Yes	_____	No	_____
	Date of last precision tank test?		_____		
C.	Has a training program related to SPCC been held in the last 12 months?	Yes	_____	No	_____
	Documentation available at the facility?	Yes	_____	No	_____
D.	Has equipment such as visible pipe, fittings, drums and tanks been checked for signs of corrosion or other deterioration?	Yes	_____	No	_____
	Deterioration noted?	Yes	_____	No	_____
E.	Are the Spill Reporting Procedures posted:				
	1. In the Generator Room?	Yes	_____	No	_____
	2. At the Fueling Area?	Yes	_____	No	_____
F.	Are caution signs and equipment labels in place and legible?	Yes	_____	No	_____
G.	Has site lighting been checked after dark? Is illumination of facility adequate?	Yes	_____	No	_____
H.	Are fire extinguishers available in the facility?	Yes	_____	No	_____
	1. Have fire extinguishers been inspected by the fire department or a qualified serviceman?	Yes	_____	No	_____
	2. Are personnel instructed in proper use of fire extinguishers?	Yes	_____	No	_____
I.	Are the mobile emergency spill carts completely supplied?	Yes		No	
J.	Have the correct agencies and personnel and their telephone numbers in the Spill Reporting Procedures been verified?	Yes	_____	No	_____

Checked by _____ Date: _____

APPENDIX C

FACILITY COMPLIANCE INSPECTION PLAN REVIEW PAGE

(Must be reviewed and signed every five years and any amendments made must be implemented within six months of review)

I have completed the review and evaluation of the SPCC plan and will (will not) amend the plan as a result.

Review Date Signature

_____ _____

Proposed amendments to plan

1) _____

2) _____

3) _____

4) _____

I have completed the review and evaluation of the SPCC plan and will (will not) amend the plan as a result.

Review Date Signature

_____ _____

Proposed amendments to plan

1) _____

2) _____

3) _____

4) _____

Maintain documentation with plant files

APPENDIX D
Spill Reporting Forms

Discharge Reporting Form

PLEASE PRINT OR TYPE

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

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

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

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

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

5. Estimated number of gallons discharged:_____

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

7. Method of discovery (check all that apply)

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

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

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

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

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

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

[ ] Other_____

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

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

[ ] Other_____

11. Actions taken in response to the discharge: _____

12. Comments: _____

13. Agencies notified (as applicable):

[ ] State Warning Point	**[ ]** National Response Center	**[ ]** Fire Department.	**[ ]** County Tanks Program	**[ ]** DEP (district/person)
(904) 488-1320	***1-800-424-8802***	_____	_____	_____

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

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

Adobe Acrobat

You can fill out this form in Acrobat Reader and then print the form with the data from the Reader. Note that you can NOT use the Save or Save As function with Acrobat Reader. If you want a copy for your records, please print an extra copy of the form.

To fill out a form:

(1) Select the hand tool . 

(2) Position the pointer inside a form field, and click. The I-beam pointer allows you to type text. The arrow pointer allows you to select a button, a check box, a radio button, or an item from a list.

(3) After entering text or selecting an item, check box, or radio button, do one of the following:

-- Press **Tab** to go to the next form field.

-- Press **Shift+Tab** to go to the previous form field.

-- In a multi-line text form field, **Enter** or **Return** goes to the next line in the same form field. You can use **Enter** on the keypad to accept a change and deselect the current form field.

-- Press **Escape** to reject the form field change and deselect the current form field.

-- If you are in Full Screen mode, pressing **Escape** a second time causes you to exit Full Screen mode.

(4) Once you have filled in the appropriate form fields, do the following:

-- Select the print tool  for a copy of the form for mailing or to keep for your records.

To clear a form in a browser window:

Exit the Acrobat viewer and start again.
Important: There is no undo for this action.

DEP Form # 62-761.900(6)

Form Title Incident Notification Form

Effective Date: July 13, 1998

Incident Notification Form

PLEASE PRINT OR TYPE

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

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

3. General information

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

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

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

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

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

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

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

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

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

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

9. Actions taken in response to the incident: _____

10. Comments: _____

11. Agencies notified (as applicable):

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

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

_____ _____

Printed Name of Owner, Operator or Authorized Representative

Signature of Owner, Operator or Authorized Representative.

Instructions for completing the Incident Notification Form

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

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

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

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

DEP District Office Addresses:

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

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

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

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

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

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

(02/01/98)

Spill Report Form	
Name & Telephone # of Person Reporting Release	
Evacuation Required? Yes/No	
Date/Time of Release	
Name of Chemical(s) Released	
Location of Release	
Approximate Quantity Released	
What was affected by release? Soil Water Air Other Be specific as possible	
Any injuries due to release? Yes/No #_____	
Any damages due to release? Yes/No #_____	
Current measure in use to stop release	
Internal notification to whom? (include time of notification)	
External notification to what agencies? (include time of notification)	
Weather information	
Other:	

Note: **Maintain documentation with facility files**

APPENDIX E
Record of Inspection Forms

FACILITY ADDRESS
I. D. #

ABOVEGROUND STORAGE TANK
VISUAL INSPECTION CHECKLIST

MONTH	DATE	SECONDARY CONTAINMENT INTEGRITY	TANK EXTERIOR INTEGRITY	PIPING EXTERIOR INTEGRITY	DRAIN VALVE SECURE	LIQUID ACCUMULATION REMOVAL	STAINED SOIL AROUND CONTAINMENT AREA	INITIALS
JANUARY								
FEBRUARY								
MARCH								
APRIL								
MAY								
JUNE								
JULY								
AUGUST								
SEPTEMBER								
OCTOBER								
NOVEMBER								
DECEMBER								

OTHER COMMENTS:

APPENDIX F
EPA SPCC Regulations – 40 CFR 112

e-CFR Data is current as of July 19, 2011

Title 40: Protection of Environment

Browse Previous | Browse Next

PART 112—OIL POLLUTION PREVENTION

Section Contents

Authority: 33 U.S.C. 1251 *et seq.* ; 33 U.S.C. 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

Source: 38 FR 34165, Dec. 11, 1973, unless otherwise noted.

Editorial Note: Nomenclature changes to part 112 appear at 65 FR 40798, June 30, 2000.

Subpart A—Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils

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Source: 67 FR 47140, July 17, 2002, unless otherwise noted.

§ 112.1 General applicability.

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(a)(1) This part establishes procedures, methods, equipment, and other requirements 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, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

(2) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

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

(1) Any aboveground container;

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

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

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

(c) As provided in section 313 of the Clean Water Act (CWA), departments, agencies, and instrumentalities of the Federal government are subject to this part to the same extent as any person.

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

(1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:

(i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.

(ii) Any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 (Appendix A of this part).

(iii) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

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

(i) The completely buried storage capacity of the facility is 42,000 U.S. gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in §112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter, or the capacity of any underground oil storage tanks deferred under 40 CFR part 280 that supply emergency diesel generators at a nuclear power generation facility licensed by the Nuclear Regulatory Commission and subject to any Nuclear Regulatory Commission provision regarding design and quality criteria, including, but not limited to, 10 CFR part 50. The completely buried storage capacity of a facility also excludes the capacity of a container that is “permanently closed,” as defined in §112.2 and the capacity of intra-facility gathering lines subject to the regulatory requirements of 49 CFR part 192 or 195.

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

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

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

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

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

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

(F) The capacity of any milk and milk product container and associated piping and appurtenances.

(3) Any offshore oil drilling, production, or workover facility that is subject to the notices and regulations of the Minerals Management Service, as specified in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).

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

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

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

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

(8) Hot-mix asphalt, or any hot-mix asphalt container.

(9) Any container for heating oil used solely at a single-family residence.

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

(11) Intra-facility gathering lines subject to the regulatory requirements of 49 CFR part 192 or 195, except that such a line's location must be identified and marked as “exempt” on the facility diagram as provided in §112.7(a)(3), if the facility is otherwise subject to this part.

(12) Any milk and milk product container and associated piping and appurtenances.

(e) This part establishes requirements for the preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. SPCC Plans are designed to complement existing laws, regulations, rules, standards, policies, and procedures pertaining to safety standards, fire prevention, and pollution prevention rules. The purpose of an SPCC Plan is to form a comprehensive Federal/State spill prevention program that minimizes the potential for discharges. The SPCC Plan must address all relevant spill prevention, control, and countermeasures necessary at the specific facility. Compliance with this part does not in any way relieve the owner or operator of an onshore or an offshore facility from compliance with other Federal, State, or local laws.

(f) Notwithstanding paragraph (d) of this section, the Regional Administrator may require that the owner or operator of any facility subject to the jurisdiction of EPA under section 311(j) of the CWA prepare and implement an SPCC Plan, or any applicable part, to carry out the purposes of the CWA.

(1) Following a preliminary determination, the Regional Administrator must provide a written notice to the owner or operator stating the reasons why he must prepare an SPCC Plan, or applicable part. The Regional Administrator must send such notice to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of such notice to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data and may consult with the Agency about the need to prepare an SPCC Plan, or applicable part.

(3) Within 30 days following the time under paragraph (b)(2) of this section within which the owner or operator may provide information and data and consult with the Agency about the need to prepare an SPCC Plan, or applicable part, the Regional Administrator must make a final determination regarding whether the owner or operator is required to prepare and implement an SPCC Plan, or applicable part. The Regional Administrator must send the final determination to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of the final determination to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(4) If the Regional Administrator makes a final determination that an SPCC Plan, or applicable part, is necessary, the owner or operator must prepare the Plan, or applicable part, within six months of that final determination and implement the Plan, or applicable part, as soon as possible, but not later than one year after the Regional Administrator has made a final determination.

(5) The owner or operator may appeal a final determination made by the Regional Administrator requiring preparation and implementation of an SPCC Plan, or applicable part, under this paragraph. The owner or operator must make the appeal to the Administrator of EPA within 30 days of receipt of the final determination under paragraph (b)(3) of this section from the Regional Administrator requiring preparation and/or implementation of an SPCC Plan, or applicable part. The owner or operator must send a complete copy of the appeal to the Regional Administrator at the time he makes the appeal to the Administrator. The appeal must contain a clear and concise statement of the issues and points of fact in the case. In the appeal, the owner or operator may also provide additional information. The additional information may be from any person. The Administrator may request additional information from the owner or operator. The Administrator must render a decision within 60 days of receiving the appeal or additional information submitted by the owner or operator and must serve the owner or operator with the decision made in the appeal in the manner described in paragraph (f)(1) of this section.

[67 FR 47140, July 17, 2002, as amended at 71 FR 77290, Dec. 26, 2006; 73 FR 74300, Dec. 5, 2008; 74 FR 58809, Nov. 13, 2009; 76 FR 21660, Apr. 18, 2011]

§ 112.2 Definitions.

top

For the purposes of this part:

Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or remove spilled oil, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in appendix E to this part (as appropriate), ice conditions, temperatures, weather-related visibility, and currents within the area in which the systems or equipment is intended to function.

Alteration means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

Animal fat means a non-petroleum oil, fat, or grease of animal, fish, or marine mammal origin.

Breakout tank means a container used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

Bulk storage container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Bunkered tank means a container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, or that lies above grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage container for purposes of this part.

Completely buried tank means any container completely below grade and covered with earth, sand,

gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for purposes of this part.

Complex means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311 (j) of the CWA.

Contiguous zone means the zone established by the United States under Article 24 of the Convention of the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial area.

Contract or other approved means means:

(1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or

(2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or

(3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic area; and/or

(4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of this part, the term discharge shall not include any discharge of oil that is authorized by a permit issued under section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407).

Facility means any mobile or fixed, onshore or offshore building, property, parcel, lease, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and oil waste treatment, or in which oil is used, as described in appendix A to this part. The boundaries of a facility depend on several site-specific factors, including but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and types of activity at the site. Contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes, or pipelines under the ownership or operation of the same person may be considered separate facilities. Only this definition governs whether a facility is subject to this part.

Farm means 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.

Fish and wildlife and sensitive environments means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Injury means a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge.

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

Maximum extent practicable means within the limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather. It includes the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the requirements in §112.20 or in a specific plan approved by the Regional Administrator.

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

Motive power container means any onboard bulk storage container used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment. An onboard bulk storage container which is used to store or transfer oil for further distribution is not a motive power container. The definition of motive power container does not include oil drilling or workover equipment, including rigs.

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 passage of the 1972 Amendments to the FWPCA (Pub. L. 92–500), and tributaries of such waters;

(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.

Non-petroleum oil means oil of any kind that is not petroleum-based, including but not limited to: Fats, oils, and greases of animal, fish, or marine mammal origin; and vegetable oils, including oils from seeds, nuts, fruits, and kernels.

Offshore facility means any facility of any kind (other than a vessel or public vessel) located in, on, or under any of the navigable waters of the United States, and any facility of any kind that is subject to the jurisdiction of the United States and is located in, on, or under any other waters.

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.

Oil-filled operational equipment means equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. Oil-filled operational equipment is not considered a bulk storage container, and does not include oil-filled manufacturing equipment (flow-through process). Examples of oil-filled operational equipment include, but are not limited to, hydraulic systems, lubricating systems (*e.g.* , those for pumps, compressors and other rotating equipment, including pumpjack lubrication systems), gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, electrical switches, and other systems containing oil solely to enable the operation of the device.

Oil Spill Removal Organization means an entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Onshore facility means any facility of any kind located in, on, or under any land within the United States, other than submerged lands.

Owner or operator means any person owning or operating an onshore facility or an offshore facility, and in the case of any abandoned offshore facility, the person who owned or operated or maintained the facility immediately prior to such abandonment.

Partially buried tank means a storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

Permanently closed means any container or facility for which:

(1) All liquid and sludge has been removed from each container and connecting line; and

(2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

Person includes an individual, firm, corporation, association, or partnership.

Petroleum oil means petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products.

Produced water container means a storage container at an oil production facility used to store the produced water after initial oil/water separation, and prior to reinjection, beneficial reuse, discharge, or transfer for disposal.

Production facility means 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 this part.

Regional Administrator means the Regional Administrator of the Environmental Protection Agency, in and for the Region in which the facility is located.

Repair means any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by §112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Storage capacity of a container means the shell capacity of the container.

Transportation-related and non-transportation-related , as applied to an onshore or offshore facility, are defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of the Environmental Protection Agency, dated November 24, 1971, (appendix A of this part).

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and

the Pacific Island Governments.

Vegetable oil means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in appendix D to this part.

[67 FR 47140, July 17, 2002, as amended at 71 FR 77290, Dec. 26, 2006; 73 FR 71943, Nov. 26, 2008; 73 FR 74300, Dec. 5, 2008]

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

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

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

(2) If your drilling, production or workover facility, including a mobile or portable facility, is offshore or has an offshore component; or your onshore facility is required to have and submit a Facility Response Plan pursuant to 40 CFR 112.20(a), and was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, and implement the amended Plan no later than November 10, 2010. If such a facility becomes operational after August 16, 2002, through November 10, 2010, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan on or before November 10, 2010. If such a facility (excluding oil production facilities) becomes operational after November 10, 2010, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan before you begin operations. You are not required to prepare a new Plan each time you move a mobile or portable facility to a new site; the Plan may be general. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. The Plan is applicable only while the mobile or portable facility is in a fixed (non-transportation) operating mode.

(b) If your oil production facility as described in paragraph (a)(1) of this section becomes operational after November 10, 2011, or as described in paragraph (a)(2) of this section becomes operational after November 10, 2010, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan within six months after you begin operations.

(c) [Reserved]

(d) Except as provided in §112.6, 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.

(vi) That, if applicable, for a produced water container subject to §112.9(c)(6), any procedure to minimize the amount of free-phase oil is designed to reduce the accumulation of free-phase oil and the procedures and frequency for required inspections, maintenance and testing have been established and are described in the Plan.

(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.

(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must:

(1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and

(2) Have the Plan available to the Regional Administrator for on-site review during normal working hours.

(f) *Extension of time.* (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your request must include:

(i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;

(ii) A full discussion of actions being taken or contemplated to minimize or mitigate such delay; and

(iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an

extension.

(g) *Qualified Facilities.* The owner or operator of a qualified facility as defined in this subparagraph may self-certify his facility's Plan, as provided in §112.6. A qualified facility is one that meets the following Tier I or Tier II qualified facility criteria:

(1) A Tier I qualified facility meets the qualification criteria in paragraph (g)(2) of this section and has no individual aboveground oil storage container with a capacity greater than 5,000 U.S. gallons.

(2) A Tier II qualified facility is one that 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 self-certification date, or since becoming subject to this part 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), and has an aggregate aboveground oil storage capacity of 10,000 U.S. gallons or less.

[67 FR 47140, July 17, 2002, as amended at 68 FR 1351, Jan. 9, 2003; 68 FR 18894, Apr. 17, 2003; 69 FR 48798, Aug. 11, 2004; 71 FR 8466, Feb. 17, 2006; 71 FR 77290, Dec. 26, 2006; 72 FR 27447, May 16, 2007; 73 FR 74301, Dec. 5, 2008, 74 FR 29141, June 19, 2009; 74 FR 58809, Nov. 13, 2009; 75 FR 63102, Oct. 14, 2010; 76 FR 21660, Apr. 18, 2011]

§ 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

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If you are the owner or operator of a facility subject to this part, you must:

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

(1) Name of the facility;

(2) Your name;

(3) Location of the facility;

(4) Maximum storage or handling capacity of the facility and normal daily throughput;

(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;

(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;

(7) The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;

(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and

(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

(b) Take no action under this section until it applies to your facility. This section does not apply until the

expiration of the time permitted for the initial preparation and implementation of the Plan under §112.3, but not including any amendments to the Plan.

(c) Send to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located a complete copy of all information you provided to the Regional Administrator under paragraph (a) of this section. Upon receipt of the information such State agency or agencies may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment, and other requirements necessary to prevent and to contain discharges from your facility.

(d) Amend your Plan, if after review by the Regional Administrator of the information you submit under paragraph (a) of this section, or submission of information to EPA by the State agency under paragraph (c) of this section, or after on-site review of your Plan, the Regional Administrator requires that you do so. The Regional Administrator may require you to amend your Plan if he finds that it does not meet the requirements of this part or that amendment is necessary to prevent and contain discharges from your facility.

(e) Act in accordance with this paragraph when the Regional Administrator proposes by certified mail or by personal delivery that you amend your SPCC Plan. If the owner or operator is a corporation, he must also notify by mail the registered agent of such corporation, if any and if known, in the State in which the facility is located. The Regional Administrator must specify the terms of such proposed amendment. Within 30 days from receipt of such notice, you may submit written information, views, and arguments on the proposed amendment. After considering all relevant material presented, the Regional Administrator must either notify you of any amendment required or rescind the notice. You must amend your Plan as required within 30 days after such notice, unless the Regional Administrator, for good cause, specifies another effective date. You must implement the amended Plan as soon as possible, but not later than six months after you amend your Plan, unless the Regional Administrator specifies another date.

(f) If you appeal a decision made by the Regional Administrator requiring an amendment to an SPCC Plan, send the appeal to the EPA Administrator in writing within 30 days of receipt of the notice from the Regional Administrator requiring the amendment under paragraph (e) of this section. You must send a complete copy of the appeal to the Regional Administrator at the time you make the appeal. The appeal must contain a clear and concise statement of the issues and points of fact in the case. It may also contain additional information from you, or from any other person. The EPA Administrator may request additional information from you, or from any other person. The EPA Administrator must render a decision within 60 days of receiving the appeal and must notify you of his decision.

§ 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

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If you are the owner or operator of a facility subject to this part, you must:

(a) Amend the SPCC Plan for your facility in accordance with the general requirements in §112.7, and with any specific section of 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.

(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.”

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

[67 FR 47140, July 17, 2002, as amended at 71 FR 77291, Dec. 26, 2006; 73 FR 74301, Dec. 5, 2008; 74 FR 58809, Nov. 13, 2009]

§ 112.6 Qualified Facilities Plan Requirements.

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

(a) *Tier I Qualified Facilities* —(1) *Preparation and Self-Certification of the Plan.* If you are an owner or operator of a facility that meets the Tier I qualified facility criteria in §112.3(g)(1), you must either: comply with the requirements of paragraph (a)(3) of this section; or prepare and implement a Plan meeting requirements of paragraph (b) of this section; or prepare and implement a Plan meeting the general Plan requirements in §112.7 and applicable requirements in subparts B and C, including having the Plan certified by a Professional Engineer as required under §112.3(d). If you do not follow the Appendix G template, you must prepare an equivalent Plan 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. To complete the template in Appendix G, you must certify that:

(i) You are familiar with the applicable requirements of 40 CFR part 112;

(ii) You have visited and examined the facility;

(iii) You prepared the Plan in accordance with accepted and sound industry practices and standards;

(iv) You have established procedures for required inspections and testing in accordance with industry inspection and testing standards or recommended practices;

(v) You will fully implement the Plan;

(vi) The facility meets the qualification criteria in §112.3(g)(1);

(vii) The Plan does not deviate from any requirement of this part as allowed by §112.7(a)(2) and 112.7 (d) or include measures pursuant to §112.9(c)(6) for produced water containers and any associated piping; and

(viii) The Plan and individual(s) responsible for implementing this Plan have the approval of management, and the facility owner or operator has committed the necessary resources to fully implement this Plan.

(2) *Technical Amendments.* You must certify any technical amendments to your Plan in accordance with paragraph (a)(1) of this section when there is a change in the facility design, construction, operation, or maintenance that affects its potential for a discharge as described in §112.1(b). If the facility change results in the facility no longer meeting the Tier I qualifying criteria in §112.3(g)(1) because an individual oil storage container capacity exceeds 5,000 U.S. gallons or the facility capacity exceeds 10,000 U.S. gallons in aggregate aboveground storage capacity, within six months following preparation of the amendment, you must either:

(i) Prepare and implement a Plan in accordance with §112.6(b) if you meet the Tier II qualified facility criteria in §112.3(g)(2); or

(ii) Prepare and implement a Plan in accordance with the general Plan requirements in §112.7, and applicable requirements in subparts B and C, including having the Plan certified by a Professional Engineer as required under §112.3(d).

(3) *Plan Template and Applicable Requirements.* Prepare and implement an SPCC Plan that meets the following requirements under §112.7 and in subparts B and C of this part: introductory paragraph of §§112.7, 112.7(a)(3)(i), 112.7(a)(3)(iv), 112.7(a)(3)(vi), 112.7(a)(4), 112.7(a)(5), 112.7(c), 112.7(e), 112.7(f), 112.7(g), 112.7(k), 112.8(b)(1), 112.8(b)(2), 112.8(c)(1), 112.8(c)(3), 112.8(c)(4), 112.8(c)(5), 112.8(c)(6), 112.8(c)(10), 112.8(d)(4), 112.9(b), 112.9(c)(1), 112.9(c)(2), 112.9(c)(3), 112.9(c)(4), 112.9(c)(5), 112.9(d)(1), 112.9(d)(3), 112.9(d)(4), 112.10(b), 112.10(c), 112.10(d), 112.12(b)(1), 112.12(b)(2), 112.12(c)(1), 112.12(c)(3), 112.12(c)(4), 112.12(c)(5), 112.12(c)(6), 112.12(c)(10), and 112.12(d)(4). The template in Appendix G to this part has been developed to meet the requirements of 40 CFR part 112 and, when completed and signed by the owner or operator, may be used as the SPCC Plan. Additionally, you must meet the following requirements:

(i) *Failure analysis, in lieu of the requirements in §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 discharge), include in your Plan a prediction of the direction and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(ii) *Bulk storage container secondary containment, in lieu of the requirements in §§112.8(c)(2) and (c)(11) and 112.12(c)(2) and (c)(11).* Construct all bulk storage container installations (except mobile refuelers and other non-transportation-related tank trucks), including mobile or portable oil storage containers, so that you provide a secondary means of containment for the entire capacity of the largest single container plus additional capacity to contain precipitation. 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 catchment basin or holding pond. Position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b).

(iii) *Overfill prevention, in lieu of the requirements in §§112.8(c)(8) and 112.12(c)(8).* Ensure that each container is provided with a system or documented procedure to prevent overfills of the container, describe the system or procedure in the SPCC Plan and regularly test to ensure proper operation or efficacy.

(b) *Tier II Qualified Facilities —*(1) *Preparation and Self-Certification of Plan.* If you are the owner or operator of a facility that meets the Tier II qualified facility criteria in §112.3(g)(2), you may choose to self-certify your Plan. You must certify in the Plan that:

(i) You are familiar with the requirements of this part;

(ii) You have visited and examined the facility;

(iii) The Plan has been prepared in accordance with accepted and sound industry practices and standards, and with the requirements of this part;

(iv) Procedures for required inspections and testing have been established;

(v) You will fully implement the Plan;

(vi) The facility meets the qualification criteria set forth under §112.3(g)(2);

(vii) The Plan does not deviate from any requirement of this part as allowed by §112.7(a)(2) and 112.7(d) or include measures pursuant to §112.9(c)(6) for produced water containers and any associated piping, except as provided in paragraph (b)(3) of this section; and

(viii) The Plan and individual(s) responsible for implementing the Plan have the full approval of

management and the facility owner or operator has committed the necessary resources to fully implement the Plan.

(2) *Technical Amendments.* If you self-certify your Plan pursuant to paragraph (b)(1) of this section, you must certify any technical amendments to your Plan in accordance with paragraph (b)(1) of this section when there is a change in the facility design, construction, operation, or maintenance that affects its potential for a discharge as described in §112.1(b), except:

(i) If a Professional Engineer certified a portion of your Plan in accordance with paragraph (b)(4) of this section, and the technical amendment affects this portion of the Plan, you must have the amended provisions of your Plan certified by a Professional Engineer in accordance with paragraph (b)(4)(ii) of this section.

(ii) If the change is such that the facility no longer meets the Tier II qualifying criteria in §112.3(g)(2) because it exceeds 10,000 U.S. gallons in aggregate aboveground storage capacity you must, within six months following the change, prepare and implement a Plan in accordance with the general Plan requirements in §112.7 and the applicable requirements in subparts B and C of this part, including having the Plan certified by a Professional Engineer as required under §112.3(d).

(3) *Applicable Requirements.* Except as provided in this paragraph, your self-certified SPCC Plan must comply with §112.7 and the applicable requirements in subparts B and C of this part:

(i) *Environmental Equivalence.* Your Plan may not include alternate methods which provide environmental equivalence pursuant to §112.7(a)(2), unless each alternate method has been reviewed and certified in writing by a Professional Engineer, as provided in paragraph (b)(4) of this section.

(ii) *Impracticability.* Your Plan may not include any determinations that secondary containment is impracticable and provisions in lieu of secondary containment pursuant to §112.7(d), unless each such determination and alternate measure has been reviewed and certified in writing by a Professional Engineer, as provided in paragraph (b)(4) of this section.

(iii) *Produced Water Containers.* Your Plan may not include any alternative procedures for skimming produced water containers in lieu of sized secondary containment pursuant to §112.9(c)(6), unless they have been reviewed and certified in writing by a Professional Engineer, as provided in paragraph (b)(4) of this section.

(4) *Professional Engineer Certification of Portions of a Qualified Facility's Self-Certified Plan.*

(i) As described in paragraph (b)(3) of this section, the facility owner or operator may not self-certify alternative measures allowed under §112.7(a)(2) or (d), that are included in the facility's Plan. Such measures must be reviewed and certified, in writing, by a licensed Professional Engineer. For each alternative measure allowed under §112.7(a)(2), the Plan must be accompanied by a written statement by a Professional Engineer that states the reason for nonconformance and describes the alternative method and how it provides equivalent environmental protection in accordance with §112.7(a)(2). For each determination of impracticability of secondary containment pursuant to §112.7(d), the Plan must clearly explain why secondary containment measures are not practicable at this facility and provide the alternative measures required in §112.7(d) in lieu of secondary containment. By certifying each measure allowed under §112.7(a)(2) and (d), the Professional Engineer attests:

(A) That he is familiar with the requirements of this part;

(B) That he or his agent has visited and examined the facility; and

(C) That the alternative method of environmental equivalence in accordance with §112.7(a)(2) or the determination of impracticability and alternative measures in accordance with §112.7(d) is consistent with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part.

(ii) As described in paragraph (b)(3) of this section, the facility owner or operator may not self-certify measures as described in §112.9(c)(6) for produced water containers and any associated piping. Such measures must be reviewed and certified, in writing, by a licensed Professional Engineer, in accordance

with §112.3(d)(1)(vi).

(iii) The review and certification by the Professional Engineer under this paragraph is limited to the alternative method which achieves equivalent environmental protection pursuant to §112.7(a)(2); to the impracticability determination and measures in lieu of secondary containment pursuant to §112.7(d); or the measures pursuant to §112.9(c)(6) for produced water containers and any associated piping and appurtenances downstream from the container.

[73 FR 74302, Dec. 5, 2008, as amended at 74 FR 58810, Nov. 13, 2009]

§ 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

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

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

(2) Comply with all applicable requirements listed in this part. Except as provided in §112.6, your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(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).

(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 fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as “exempt” underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under §112.1(d)(11). You must also address in your Plan:

(i) The type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities;

(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.

(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.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in §112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. 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, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing or drip pans;

(iii) Sumps and collection systems;

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

(v) Weirs, booms, or other barriers;

(vi) Spill diversion ponds;

(vii) Retention ponds; or

(viii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) Provided your Plan is certified by a licensed Professional Engineer under §112.3(d), or, in the case of a qualified facility that meets the criteria in §112.3(g), the relevant sections of your Plan are certified by a licensed Professional Engineer under §112.6(d), if you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11) 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.

(e) *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.

(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.

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

(h) *Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).*

(1) Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading racks. 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 brake interlock system in the area adjacent to a loading/unloading rack, to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

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

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

necessary, take appropriate action.

(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.

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

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

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

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

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

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

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

[67 FR 47140, July 17, 2002, as amended at 71 FR 77292, Dec. 26, 2006; 73 FR 74303, Dec. 5, 2008; 74 FR 58810, Nov. 13, 2009]

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)

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Source: 67 FR 47146, July 17, 2002, unless otherwise noted.

§ 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

top

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

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

(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.

(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.

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

(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.

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

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

(6) Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that

are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or 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 satisfy the recordkeeping requirements of this paragraph.

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

(v) You must regularly test liquid level sensing devices to ensure proper operation.

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

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

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

(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.

[67 FR 47146, July 17, 2002, as amended at 71 FR 77293, Dec. 26, 2006; 73 FR 74304, Dec. 5, 2008]

§ 112.9 Spill Prevention, Control, and Countermeasure Plan Requirements for onshore oil production facilities (excluding drilling and workover facilities).

top

If you are the owner or operator of an onshore oil production facility (excluding a drilling or workover facility), you must:

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

(b) *Oil production facility drainage.* (1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in §112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under §112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in §112.8(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.

(2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You must promptly remove any accumulations of oil.

(c) *Oil production facility 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 the conditions of storage.

(2) Except as described in paragraph (c)(5) of this section for flow-through process vessels and paragraph (c)(6) of this section for produced water containers and any associated piping and appurtenances downstream from the container, construct all tank battery, separation, and treating facility 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 safely confine drainage from undiked areas in a catchment basin or holding pond.

(3) Except as described in paragraph (c)(5) of this section for flow-through process vessels and paragraph (c)(6) of this section for produced water containers and any associated piping and appurtenances downstream from the container, periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.

(4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.

(ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.

(iii) Vacuum protection adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.

(5) *Flow-through process vessels.* The owner or operator of a facility with flow-through process vessels

may choose to implement the alternate requirements as described below in lieu of sized secondary containment required in paragraphs (c)(2) and (c)(3) of this section.

(i) Periodically and on a regular schedule visually inspect and/or test flow-through process vessels and associated components (such as dump valves) for leaks, corrosion, or other conditions that could lead to a discharge as described in §112.1(b).

(ii) Take corrective action or make repairs to flow-through process vessels and any associated components as indicated by regularly scheduled visual inspections, tests, or evidence of an oil discharge.

(iii) Promptly remove or initiate actions to stabilize and remediate any accumulations of oil discharges associated with flow-through process vessels.

(iv) If your facility discharges more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b), or discharges more than 42 U.S. gallons of oil in each of two discharges as described in §112.1(b) within any twelve month period, from flow-through process vessels (excluding discharges that are the result of natural disasters, acts of war, or terrorism) then you must, within six months from the time the facility becomes subject to this paragraph, ensure that all flow-through process vessels subject to this subpart comply with §112.9(c)(2) and (c)(3).

(6) *Produced water containers.* For each produced water container, comply with §112.9(c)(1) and (c)(4); and §112.9(c)(2) and (c)(3), or comply with the provisions of the following paragraphs (c)(6)(i) through (v):

(i) Implement, on a regular schedule, a procedure for each produced water container that is designed to separate the free-phase oil that accumulates on the surface of the produced water. Include in the Plan a description of the procedures, frequency, amount of free-phase oil expected to be maintained inside the container, and a Professional Engineer certification in accordance with §112.3(d)(1)(vi). Maintain records of such events in accordance with §112.7(e). Records kept under usual and customary business practices will suffice for purposes of this paragraph. If this procedure is not implemented as described in the Plan or no records are maintained, then you must comply with §112.9(c)(2) and (c)(3).

(ii) On a regular schedule, visually inspect and/or test the produced water container and associated piping for leaks, corrosion, or other conditions that could lead to a discharge as described in §112.1(b) in accordance with good engineering practice.

(iii) Take corrective action or make repairs to the produced water container and any associated piping as indicated by regularly scheduled visual inspections, tests, or evidence of an oil discharge.

(iv) Promptly remove or initiate actions to stabilize and remediate any accumulations of oil discharges associated with the produced water container.

(v) If your facility discharges more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b), or discharges more than 42 U.S. gallons of oil in each of two discharges as described in §112.1(b) within any twelve month period from a produced water container subject to this subpart (excluding discharges that are the result of natural disasters, acts of war, or terrorism) then you must, within six months from the time the facility becomes subject to this paragraph, ensure that all produced water containers subject to this subpart comply with §112.9(c)(2) and (c)(3).

(d) *Facility transfer operations, oil production facility.* (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.

(3) For flowlines and intra-facility gathering lines that are not provided with secondary containment in accordance with §112.7(c), unless you have submitted a response plan under §112.20, provide in your Plan the following:

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

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

(4) Prepare and implement a written program of flowline/intra-facility gathering line maintenance. The maintenance program must address your procedures to:

(i) Ensure that flowlines and intra-facility gathering lines and associated valves and equipment are compatible with the type of production fluids, their potential corrosivity, volume, and pressure, and other conditions expected in the operational environment.

(ii) Visually inspect and/or test flowlines and intra-facility gathering lines and associated appurtenances on a periodic and regular schedule for leaks, oil discharges, corrosion, or other conditions that could lead to a discharge as described in §112.1(b). For flowlines and intra-facility gathering lines that are not provided with secondary containment in accordance with §112.7(c), the frequency and type of testing must allow for the implementation of a contingency plan as described under part 109 of this chapter.

(iii) Take corrective action or make repairs to any flowlines and intra-facility gathering lines and associated appurtenances as indicated by regularly scheduled visual inspections, tests, or evidence of a discharge.

(iv) Promptly remove or initiate actions to stabilize and remediate any accumulations of oil discharges associated with flowlines, intra-facility gathering lines, and associated appurtenances.

[73 FR, 74304, Dec. 5, 2008, as amended at 74 FR 58810, Nov. 13, 2009]

§ 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

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If you are the owner or operator of an onshore oil drilling and workover facility, you must:

(a) Meet the general requirements listed under §112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in §112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

§ 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

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If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements listed under §112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in §112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of oil by:

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump valves.

(e) Equip atmospheric storage or surge containers with high liquid level sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the flow.

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms.

(k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while the BOP assembly and well control system are on the well.

(l) Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.

(n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.

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.

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Source: 67 FR 57149, July 17, 2002, unless otherwise noted.

§ 112.12 Spill Prevention, Control, and Countermeasure Plan requirements.

 top

If you are the owner or operator of an onshore facility, you must:

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

(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, subject to the requirements of 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.

(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.

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

(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.

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

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

(6) *Bulk storage container inspections.*

(i) Except for containers that meet the criteria provided in paragraph (c)(6)(ii) of this section, test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: Visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or 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 satisfy the recordkeeping requirements of this paragraph.

(ii) For bulk storage containers that are subject to 21 CFR part 110, are elevated, constructed of austenitic stainless steel, have no external insulation, and are shop-fabricated, conduct formal visual inspection on a regular schedule. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. You must determine and document in the Plan the appropriate qualifications for personnel performing tests and inspections. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph (c)(6).

(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

(v) You must regularly test liquid level sensing devices to ensure proper operation.

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

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

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

(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.

[67 FR 57149, July 17, 2002, as amended at 71 FR 77293, Dec. 26, 2006; 73 FR 74305, Dec. 5, 2008]

§§ 112.13-112.15 [Reserved]

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Subpart D—Response Requirements

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§ 112.20 Facility response plans.

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(a) The owner or operator of any non-transportation-related onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines shall prepare and submit a facility response plan to the Regional Administrator, according to the following provisions:

(1) For the owner or operator of a facility in operation on or before February 18, 1993 who is required to

prepare and submit a response plan under 33 U.S.C. 1321(j)(5), the Oil Pollution Act of 1990 (Pub. L. 101–380, 33 U.S.C. 2701 *et seq.*) requires the submission of a response plan that satisfies the requirements of 33 U.S.C. 1321(j)(5) no later than February 18, 1993.

(i) The owner or operator of an existing facility that was in operation on or before February 18, 1993 who submitted a response plan by February 18, 1993 shall revise the response plan to satisfy the requirements of this section and resubmit the response plan or updated portions of the response plan to the Regional Administrator by February 18, 1995.

(ii) The owner or operator of an existing facility in operation on or before February 18, 1993 who failed to submit a response plan by February 18, 1993 shall prepare and submit a response plan that satisfies the requirements of this section to the Regional Administrator before August 30, 1994.

(2) The owner or operator of a facility in operation on or after August 30, 1994 that satisfies the criteria in paragraph (f)(1) of this section or that is notified by the Regional Administrator pursuant to paragraph (b) of this section shall prepare and submit a facility response plan that satisfies the requirements of this section to the Regional Administrator.

(i) For a facility that commenced operations after February 18, 1993 but prior to August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan or updated portions of the response plan, along with a completed version of the response plan cover sheet contained in appendix F to this part, to the Regional Administrator prior to August 30, 1994.

(ii) For a newly constructed facility that commences operation after August 30, 1994, and is required to prepare and submit a response plan based on the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in appendix F to this part, to the Regional Administrator prior to the start of operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iii) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of a planned change in design, construction, operation, or maintenance that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in appendix F to this part, to the Regional Administrator before the portion of the facility undergoing change commences operations (adjustments to the response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(iv) For a facility required to prepare and submit a response plan after August 30, 1994, as a result of an unplanned event or change in facility characteristics that renders the facility subject to the criteria in paragraph (f)(1) of this section, the owner or operator shall submit the response plan, along with a completed version of the response plan cover sheet contained in appendix F to this part, to the Regional Administrator within six months of the unplanned event or change.

(3) In the event the owner or operator of a facility that is required to prepare and submit a response plan uses an alternative formula that is comparable to one contained in appendix C to this part to evaluate the criterion in paragraph (f)(1)(ii)(B) or (f)(1)(ii)(C) of this section, the owner or operator shall attach documentation to the response plan cover sheet contained in appendix F to this part that demonstrates the reliability and analytical soundness of the alternative formula.

(4) *Preparation and submission of response plans — Animal fat and vegetable oil facilities.* The owner or operator of any non-transportation-related facility that handles, stores, or transports animal fats and vegetable oils must prepare and submit a facility response plan as follows:

(i) *Facilities with approved plans.* The owner or operator of a facility with a facility response plan that has been approved under paragraph (c) of this section by July 31, 2000 need not prepare or submit a revised plan except as otherwise required by paragraphs (b), (c), or (d) of this section.

(ii) *Facilities with plans that have been submitted to the Regional Administrator.* Except for facilities with approved plans as provided in paragraph (a)(4)(i) of this section, the owner or operator of a facility that has submitted a response plan to the Regional Administrator prior to July 31, 2000 must review the plan

to determine if it meets or exceeds the applicable provisions of this part. An owner or operator need not prepare or submit a new plan if the existing plan meets or exceeds the applicable provisions of this part. If the plan does not meet or exceed the applicable provisions of this part, the owner or operator must prepare and submit a new plan by September 28, 2000.

(iii) *Newly regulated facilities.* The owner or operator of a newly constructed facility that commences operation after July 31, 2000 must prepare and submit a plan to the Regional Administrator in accordance with paragraph (a)(2)(ii) of this section. The plan must meet or exceed the applicable provisions of this part. The owner or operator of an existing facility that must prepare and submit a plan after July 31, 2000 as a result of a planned or unplanned change in facility characteristics that causes the facility to become regulated under paragraph (f)(1) of this section, must prepare and submit a plan to the Regional Administrator in accordance with paragraph (a)(2)(iii) or (iv) of this section, as appropriate. The plan must meet or exceed the applicable provisions of this part.

(iv) *Facilities amending existing plans.* The owner or operator of a facility submitting an amended plan in accordance with paragraph (d) of this section after July 31, 2000, including plans that had been previously approved, must also review the plan to determine if it meets or exceeds the applicable provisions of this part. If the plan does not meet or exceed the applicable provisions of this part, the owner or operator must revise and resubmit revised portions of an amended plan to the Regional Administrator in accordance with paragraph (d) of this section, as appropriate. The plan must meet or exceed the applicable provisions of this part.

(b)(1) The Regional Administrator may at any time require the owner or operator of any non-transportation-related onshore facility to prepare and submit a facility response plan under this section after considering the factors in paragraph (f)(2) of this section. If such a determination is made, the Regional Administrator shall notify the facility owner or operator in writing and shall provide a basis for the determination. If the Regional Administrator notifies the owner or operator in writing of the requirement to prepare and submit a response plan under this section, the owner or operator of the facility shall submit the response plan to the Regional Administrator within six months of receipt of such written notification.

(2) The Regional Administrator shall review plans submitted by such facilities to determine whether the facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines.

(c) The Regional Administrator shall determine whether a facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, based on the factors in paragraph (f)(3) of this section. If such a determination is made, the Regional Administrator shall notify the owner or operator of the facility in writing and:

(1) Promptly review the facility response plan;

(2) Require amendments to any response plan that does not meet the requirements of this section;

(3) Approve any response plan that meets the requirements of this section; and

(4) Review each response plan periodically thereafter on a schedule established by the Regional Administrator provided that the period between plan reviews does not exceed five years.

(d)(1) The owner or operator of a facility for which a response plan is required under this part shall revise and resubmit revised portions of the response plan within 60 days of each facility change that materially may affect the response to a worst case discharge, including:

(i) A change in the facility's configuration that materially alters the information included in the response plan;

(ii) A change in the type of oil handled, stored, or transferred that materially alters the required response resources;

(iii) A material change in capabilities of the oil spill removal organization(s) that provide equipment and

personnel to respond to discharges of oil described in paragraph (h)(5) of this section;

(iv) A material change in the facility's spill prevention and response equipment or emergency response procedures; and

(v) Any other changes that materially affect the implementation of the response plan.

(2) Except as provided in paragraph (d)(1) of this section, amendments to personnel and telephone number lists included in the response plan and a change in the oil spill removal organization(s) that does not result in a material change in support capabilities do not require approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

(3) The owner or operator of a facility that submits changes to a response plan as provided in paragraph (d)(1) or (d)(2) of this section shall provide the EPA-issued facility identification number (where one has been assigned) with the changes.

(4) The Regional Administrator shall review for approval changes to a response plan submitted pursuant to paragraph (d)(1) of this section for a facility determined pursuant to paragraph (f)(3) of this section to have the potential to cause significant and substantial harm to the environment.

(e) If the owner or operator of a facility determines pursuant to paragraph (a)(2) of this section that the facility could not, because of its location, reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, the owner or operator shall complete and maintain at the facility the certification form contained in appendix C to this part and, in the event an alternative formula that is comparable to one contained in appendix C to this part is used to evaluate the criterion in paragraph (f)(1)(ii)(B) or (f)(1)(ii)(C) of this section, the owner or operator shall attach documentation to the certification form that demonstrates the reliability and analytical soundness of the comparable formula and shall notify the Regional Administrator in writing that an alternative formula was used.

(f)(1) A facility could, because of its location, reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines pursuant to paragraph (a)(2) of this section, if it meets any of the following criteria applied in accordance with the flowchart contained in attachment C-I to appendix C to this part:

(i) The facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 gallons; or

(ii) The facility's total oil storage capacity is greater than or equal to 1 million gallons, and one of the following is true:

(A) The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground oil storage tank within each storage area plus sufficient freeboard to allow for precipitation;

(B) The facility is located at a distance (as calculated using the appropriate formula in appendix C to this part or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III of the “Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments” (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan prepared pursuant to section 311(j)(4) of the Clean Water Act;

(C) The facility is located at a distance (as calculated using the appropriate formula in appendix C to this part or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake; or

(D) The facility has had a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years.

(2)(i) To determine whether a facility could, because of its location, reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines pursuant to paragraph (b) of this section, the Regional Administrator shall consider the following:

(A) Type of transfer operation;

(B) Oil storage capacity;

(C) Lack of secondary containment;

(D) Proximity to fish and wildlife and sensitive environments and other areas determined by the Regional Administrator to possess ecological value;

(E) Proximity to drinking water intakes;

(F) Spill history; and

(G) Other site-specific characteristics and environmental factors that the Regional Administrator determines to be relevant to protecting the environment from harm by discharges of oil into or on navigable waters or adjoining shorelines.

(ii) Any person, including a member of the public or any representative from a Federal, State, or local agency who believes that a facility subject to this section could, because of its location, reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines may petition the Regional Administrator to determine whether the facility meets the criteria in paragraph (f)(2)(i) of this section. Such petition shall include a discussion of how the factors in paragraph (f)(2)(i) of this section apply to the facility in question. The RA shall consider such petitions and respond in an appropriate amount of time.

(3) To determine whether a facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, the Regional Administrator may consider the factors in paragraph (f)(2) of this section as well as the following:

(i) Frequency of past discharges;

(ii) Proximity to navigable waters;

(iii) Age of oil storage tanks; and

(iv) Other facility-specific and Region-specific information, including local impacts on public health.

(g)(1) All facility response plans shall be consistent with the requirements of the National Oil and Hazardous Substance Pollution Contingency Plan (40 CFR part 300) and applicable Area Contingency Plans prepared pursuant to section 311(j)(4) of the Clean Water Act. The facility response plan should be coordinated with the local emergency response plan developed by the local emergency planning committee under section 303 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11001 et seq.). Upon request, the owner or operator should provide a copy of the facility response plan to the local emergency planning committee or State emergency response commission.

(2) The owner or operator shall review relevant portions of the National Oil and Hazardous Substances Pollution Contingency Plan and applicable Area Contingency Plan annually and, if necessary, revise the facility response plan to ensure consistency with these plans.

(3) The owner or operator shall review and update the facility response plan periodically to reflect changes at the facility.

(h) A response plan shall follow the format of the model facility-specific response plan included in appendix F to this part, unless you have prepared an equivalent response plan acceptable to the

Regional Administrator to meet State or other Federal requirements. A response plan that does not follow the specified format in appendix F to this part shall have an emergency response action plan as specified in paragraphs (h)(1) of this section and be supplemented with a cross-reference section to identify the location of the elements listed in paragraphs (h)(2) through (h)(10) of this section. To meet the requirements of this part, a response plan shall address the following elements, as further described in appendix F to this part:

(1) *Emergency response action plan.* The response plan shall include an emergency response action plan in the format specified in paragraphs (h)(1)(i) through (viii) of this section that is maintained in the front of the response plan, or as a separate document accompanying the response plan, and that includes the following information:

(i) The identity and telephone number of a qualified individual having full authority, including contracting authority, to implement removal actions;

(ii) The identity of individuals or organizations to be contacted in the event of a discharge so that immediate communications between the qualified individual identified in paragraph (h)(1) of this section and the appropriate Federal officials and the persons providing response personnel and equipment can be ensured;

(iii) A description of information to pass to response personnel in the event of a reportable discharge;

(iv) A description of the facility's response equipment and its location;

(v) A description of response personnel capabilities, including the duties of persons at the facility during a response action and their response times and qualifications;

(vi) Plans for evacuation of the facility and a reference to community evacuation plans, as appropriate;

(vii) A description of immediate measures to secure the source of the discharge, and to provide adequate containment and drainage of discharged oil; and

(viii) A diagram of the facility.

(2) *Facility information.* The response plan shall identify and discuss the location and type of the facility, the identity and tenure of the present owner and operator, and the identity of the qualified individual identified in paragraph (h)(1) of this section.

(3) *Information about emergency response.* The response plan shall include:

(i) The identity of private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge and other discharges of oil described in paragraph (h)(5) of this section, and to mitigate or prevent a substantial threat of a worst case discharge (To identify response resources to meet the facility response plan requirements of this section, owners or operators shall follow Appendix E to this part or, where not appropriate, shall clearly demonstrate in the response plan why use of Appendix E of this part is not appropriate at the facility and make comparable arrangements for response resources);

(ii) Evidence of contracts or other approved means for ensuring the availability of such personnel and equipment;

(iii) The identity and the telephone number of individuals or organizations to be contacted in the event of a discharge so that immediate communications between the qualified individual identified in paragraph (h)(1) of this section and the appropriate Federal official and the persons providing response personnel and equipment can be ensured;

(iv) A description of information to pass to response personnel in the event of a reportable discharge;

(v) A description of response personnel capabilities, including the duties of persons at the facility during a response action and their response times and qualifications;

(vi) A description of the facility's response equipment, the location of the equipment, and equipment testing;

(vii) Plans for evacuation of the facility and a reference to community evacuation plans, as appropriate;

(viii) A diagram of evacuation routes; and

(ix) A description of the duties of the qualified individual identified in paragraph (h)(1) of this section, that include:

(A) Activate internal alarms and hazard communication systems to notify all facility personnel;

(B) Notify all response personnel, as needed;

(C) Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;

(D) Notify and provide necessary information to the appropriate Federal, State, and local authorities with designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Committee;

(E) Assess the interaction of the discharged substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;

(F) Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion);

(G) Assess and implement prompt removal actions to contain and remove the substance released;

(H) Coordinate rescue and response actions as previously arranged with all response personnel;

(I) Use authority to immediately access company funding to initiate cleanup activities; and

(J) Direct cleanup activities until properly relieved of this responsibility.

(4) *Hazard evaluation.* The response plan shall discuss the facility's known or reasonably identifiable history of discharges reportable under 40 CFR part 110 for the entire life of the facility and shall identify areas within the facility where discharges could occur and what the potential effects of the discharges would be on the affected environment. To assess the range of areas potentially affected, owners or operators shall, where appropriate, consider the distance calculated in paragraph (f)(1)(ii) of this section to determine whether a facility could, because of its location, reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines.

(5) *Response planning levels.* The response plan shall include discussion of specific planning scenarios for:

(i) A worst case discharge, as calculated using the appropriate worksheet in appendix D to this part. In cases where the Regional Administrator determines that the worst case discharge volume calculated by the facility is not appropriate, the Regional Administrator may specify the worst case discharge amount to be used for response planning at the facility. For complexes, the worst case planning quantity shall be the larger of the amounts calculated for each component of the facility;

(ii) A discharge of 2,100 gallons or less, provided that this amount is less than the worst case discharge amount. For complexes, this planning quantity shall be the larger of the amounts calculated for each component of the facility; and

(iii) A discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less, provided that this amount is less than the worst case discharge amount. For complexes, this planning quantity shall be the larger of the amounts calculated for each component of the facility.

(6) *Discharge detection systems.* The response plan shall describe the procedures and equipment used to detect discharges.

(7) *Plan implementation.* The response plan shall describe:

(i) Response actions to be carried out by facility personnel or contracted personnel under the response plan to ensure the safety of the facility and to mitigate or prevent discharges described in paragraph (h)(5) of this section or the substantial threat of such discharges;

(ii) A description of the equipment to be used for each scenario;

(iii) Plans to dispose of contaminated cleanup materials; and

(iv) Measures to provide adequate containment and drainage of discharged oil.

(8) *Self-inspection, drills/exercises, and response training.* The response plan shall include:

(i) A checklist and record of inspections for tanks, secondary containment, and response equipment;

(ii) A description of the drill/exercise program to be carried out under the response plan as described in §112.21;

(iii) A description of the training program to be carried out under the response plan as described in §112.21; and

(iv) Logs of discharge prevention meetings, training sessions, and drills/exercises. These logs may be maintained as an annex to the response plan.

(9) *Diagrams.* The response plan shall include site plan and drainage plan diagrams.

(10) *Security systems.* The response plan shall include a description of facility security systems.

(11) *Response plan cover sheet.* The response plan shall include a completed response plan cover sheet provided in section 2.0 of appendix F to this part.

(i)(1) In the event the owner or operator of a facility does not agree with the Regional Administrator's determination that the facility could, because of its location, reasonably be expected to cause substantial harm or significant and substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shorelines, or that amendments to the facility response plan are necessary prior to approval, such as changes to the worst case discharge planning volume, the owner or operator may submit a request for reconsideration to the Regional Administrator and provide additional information and data in writing to support the request. The request and accompanying information must be submitted to the Regional Administrator within 60 days of receipt of notice of the Regional Administrator's original decision. The Regional Administrator shall consider the request and render a decision as rapidly as practicable.

(2) In the event the owner or operator of a facility believes a change in the facility's classification status is warranted because of an unplanned event or change in the facility's characteristics (i.e., substantial harm or significant and substantial harm), the owner or operator may submit a request for reconsideration to the Regional Administrator and provide additional information and data in writing to support the request. The Regional Administrator shall consider the request and render a decision as rapidly as practicable.

(3) After a request for reconsideration under paragraph (i)(1) or (i)(2) of this section has been denied by the Regional Administrator, an owner or operator may appeal a determination made by the Regional

Administrator. The appeal shall be made to the EPA Administrator and shall be made in writing within 60 days of receipt of the decision from the Regional Administrator that the request for reconsideration was denied. A complete copy of the appeal must be sent to the Regional Administrator at the time the appeal is made. The appeal shall contain a clear and concise statement of the issues and points of fact in the case. It also may contain additional information from the owner or operator, or from any other person. The EPA Administrator may request additional information from the owner or operator, or from any other person. The EPA Administrator shall render a decision as rapidly as practicable and shall notify the owner or operator of the decision.

[59 FR 34098, July 1, 1994, as amended at 65 FR 40798, June 30, 2000; 66 FR 34560, June 29, 2001; 67 FR 47151, July 17, 2002]

§ 112.21 Facility response training and drills/exercises.

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(a) The owner or operator of any facility required to prepare a facility response plan under §112.20 shall develop and implement a facility response training program and a drill/exercise program that satisfy the requirements of this section. The owner or operator shall describe the programs in the response plan as provided in §112.20(h)(8).

(b) The facility owner or operator shall develop a facility response training program to train those personnel involved in oil spill response activities. It is recommended that the training program be based on the USCG's Training Elements for Oil Spill Response, as applicable to facility operations. An alternative program can also be acceptable subject to approval by the Regional Administrator.

(1) The owner or operator shall be responsible for the proper instruction of facility personnel in the procedures to respond to discharges of oil and in applicable oil spill response laws, rules, and regulations.

(2) Training shall be functional in nature according to job tasks for both supervisory and non-supervisory operational personnel.

(3) Trainers shall develop specific lesson plans on subject areas relevant to facility personnel involved in oil spill response and cleanup.

(c) The facility owner or operator shall develop a program of facility response drills/exercises, including evaluation procedures. A program that follows the National Preparedness for Response Exercise Program (PREP) (see appendix E to this part, section 13, for availability) will be deemed satisfactory for purposes of this section. An alternative program can also be acceptable subject to approval by the Regional Administrator.

[59 FR 34101, July 1, 1994, as amended at 65 FR 40798, June 30, 2000]

Appendix A to Part 112—Memorandum of Understanding Between the Secretary of Transportation and the Administrator of the Environmental Protection Agency

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section ii—definitions

The Environmental Protection Agency and the Department of Transportation agree that for the purposes of Executive Order 11548, the term:

(1) *Non-transportation-related onshore and offshore facilities* means:

(A) Fixed onshore and offshore oil well drilling facilities including all equipment and appurtenances related thereto used in drilling operations for exploratory or development wells, but excluding any

terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(B) Mobile onshore and offshore oil well drilling platforms, barges, trucks, or other mobile facilities including all equipment and appurtenances related thereto when such mobile facilities are fixed in position for the purpose of drilling operations for exploratory or development wells, but excluding any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(C) Fixed onshore and offshore oil production structures, platforms, derricks, and rigs including all equipment and appurtenances related thereto, as well as completed wells and the wellhead separators, oil separators, and storage facilities used in the production of oil, but excluding any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(D) Mobile onshore and offshore oil production facilities including all equipment and appurtenances related thereto as well as completed wells and wellhead equipment, piping from wellheads to oil separators, oil separators, and storage facilities used in the production of oil when such mobile facilities are fixed in position for the purpose of oil production operations, but excluding any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(E) Oil refining facilities including all equipment and appurtenances related thereto as well as in-plant processing units, storage units, piping, drainage systems and waste treatment units used in the refining of oil, but excluding any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(F) Oil storage facilities including all equipment and appurtenances related thereto as well as fixed bulk plant storage, terminal oil storage facilities, consumer storage, pumps and drainage systems used in the storage of oil, but excluding inline or breakout storage tanks needed for the continuous operation of a pipeline system and any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(G) Industrial, commercial, agricultural or public facilities which use and store oil, but excluding any terminal facility, unit or process integrally associated with the handling or transferring of oil in bulk to or from a vessel.

(H) Waste treatment facilities including in-plant pipelines, effluent discharge lines, and storage tanks, but excluding waste treatment facilities located on vessels and terminal storage tanks and appurtenances for the reception of oily ballast water or tank washings from vessels and associated systems used for off-loading vessels.

(I) Loading racks, transfer hoses, loading arms and other equipment which are appurtenant to a nontransportation-related facility or terminal facility and which are used to transfer oil in bulk to or from highway vehicles or railroad cars.

(J) Highway vehicles and railroad cars which are used for the transport of oil exclusively within the confines of a nontransportation-related facility and which are not intended to transport oil in interstate or intrastate commerce.

(K) Pipeline systems which are used for the transport of oil exclusively within the confines of a nontransportation-related facility or terminal facility and which are not intended to transport oil in interstate or intrastate commerce, but excluding pipeline systems used to transfer oil in bulk to or from a vessel.

(2) *Transportation-related onshore and offshore facilities* means:

(A) Onshore and offshore terminal facilities including transfer hoses, loading arms and other equipment and appurtenances used for the purpose of handling or transferring oil in bulk to or from a vessel as well as storage tanks and appurtenances for the reception of oily ballast water or tank washings from vessels, but excluding terminal waste treatment facilities and terminal oil storage facilities.

(B) Transfer hoses, loading arms and other equipment appurtenant to a non-transportation-related

facility which is used to transfer oil in bulk to or from a vessel.

(C) Interstate and intrastate onshore and offshore pipeline systems including pumps and appurtenances related thereto as well as in-line or breakout storage tanks needed for the continuous operation of a pipeline system, and pipelines from onshore and offshore oil production facilities, but excluding onshore and offshore piping from wellheads to oil separators and pipelines which are used for the transport of oil exclusively within the confines of a nontransportation-related facility or terminal facility and which are not intended to transport oil in interstate or intrastate commerce or to transfer oil in bulk to or from a vessel.

(D) Highway vehicles and railroad cars which are used for the transport of oil in interstate or intrastate commerce and the equipment and appurtenances related thereto, and equipment used for the fueling of locomotive units, as well as the rights-of-way on which they operate. Excluded are highway vehicles and railroad cars and motive power used exclusively within the confines of a nontransportation-related facility or terminal facility and which are not intended for use in interstate or intrastate commerce.

Appendix B to Part 112—Memorandum of Understanding Among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency

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Purpose

This Memorandum of Understanding (MOU) establishes the jurisdictional responsibilities for offshore facilities, including pipelines, pursuant to section 311 (j)(1)(c), (j)(5), and (j)(6)(A) of the Clean Water Act (CWA), as amended by the Oil Pollution Act of 1990 (Public Law 101–380). The Secretary of the Department of the Interior (DOI), Secretary of the Department of Transportation (DOT), and Administrator of the Environmental Protection Agency (EPA) agree to the division of responsibilities set forth below for spill prevention and control, response planning, and equipment inspection activities pursuant to those provisions.

Background

Executive Order (E.O.) 12777 (56 FR 54757) delegates to DOI, DOT, and EPA various responsibilities identified in section 311(j) of the CWA. Sections 2(b)(3), 2(d)(3), and 2(e)(3) of E.O. 12777 assigned to DOI spill prevention and control, contingency planning, and equipment inspection activities associated with offshore facilities. Section 311(a)(11) defines the term “offshore facility” to include facilities of any kind located in, on, or under navigable waters of the United States. By using this definition, the traditional DOI role of regulating facilities on the Outer Continental Shelf is expanded by E.O. 12777 to include inland lakes, rivers, streams, and any other inland waters.

Responsibilities

Pursuant to section 2(i) of E.O. 12777, DOI redelegates, and EPA and DOT agree to assume, the functions vested in DOI by sections 2(b)(3), 2(d)(3), and 2(e)(3) of E.O. 12777 as set forth below. For purposes of this MOU, the term “coast line” shall be defined as in the Submerged Lands Act (43 U.S.C. 1301(c)) to mean “the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters.”

1. To EPA, DOI redelegates responsibility for non-transportation-related offshore facilities located landward of the coast line.

2. To DOT, DOI redelegates responsibility for transportation-related facilities, including pipelines, located landward of the coast line. The DOT retains jurisdiction for deepwater ports and their associated seaward pipelines, as delegated by E.O. 12777.

3. The DOI retains jurisdiction over facilities, including pipelines, located seaward of the coast line, except for deepwater ports and associated seaward pipelines delegated by E.O. 12777 to DOT.

Effective Date

This MOU is effective on the date of the final execution by the indicated signatories.

Limitations

1. The DOI, DOT, and EPA may agree in writing to exceptions to this MOU on a facility-specific basis. Affected parties will receive notification of the exceptions.

2. Nothing in this MOU is intended to replace, supersede, or modify any existing agreements between or among DOI, DOT, or EPA.

Modification and Termination

Any party to this agreement may propose modifications by submitting them in writing to the heads of the other agency/department. No modification may be adopted except with the consent of all parties. All parties shall indicate their consent to or disagreement with any proposed modification within 60 days of receipt. Upon the request of any party, representatives of all parties shall meet for the purpose of considering exceptions or modifications to this agreement. This MOU may be terminated only with the mutual consent of all parties.

Dated: November 8, 1993.

Bruce Babbitt,

Secretary of the Interior.

Dated: December 14, 1993.

Federico Peña,

Secretary of Transportation.

Dated: February 3, 1994.

Carol M. Browner,

Administrator, Environmental Protection Agency.

[59 FR 34102, July 1, 1994]

Appendix C to Part 112—Substantial Harm Criteria

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1.0 Introduction

The flowchart provided in Attachment C–I to this appendix shows the decision tree with the criteria to identify whether a facility "could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters or adjoining shorelines." In addition, the Regional Administrator has the discretion to identify facilities that must prepare and submit facility-specific response plans to EPA.

1.1 Definitions

1.1.1 *Great Lakes* means Lakes Superior, Michigan, Huron, Erie, and Ontario, their connecting and tributary waters, the Saint Lawrence River as far as Saint Regis, and adjacent port areas.

1.1.2 Higher Volume Port Areas include

(1) Boston, MA;

(2) New York, NY;

(3) Delaware Bay and River to Philadelphia, PA;

(4) St. Croix, VI;

(5) Pascagoula, MS;

(6) Mississippi River from Southwest Pass, LA to Baton Rouge, LA;

(7) Louisiana Offshore Oil Port (LOOP), LA;

(8) Lake Charles, LA;

(9) Sabine-Neches River, TX;

(10) Galveston Bay and Houston Ship Channel, TX;

(11) Corpus Christi, TX;

(12) Los Angeles/Long Beach Harbor, CA;

(13) San Francisco Bay, San Pablo Bay, Carquinez Strait, and Suisun Bay to Antioch, CA;

(14) Straits of Juan de Fuca from Port Angeles, WA to and including Puget Sound, WA;

(15) Prince William Sound, AK; and

(16) Others as specified by the Regional Administrator for any EPA Region.

1.1.3 *Inland Area* means the area shoreward of the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines as defined in 33 CFR 80.740–80.850). The inland area does not include the Great Lakes.

1.1.4 *Rivers and Canals* means a body of water confined within the inland area, including the Intracoastal Waterways and other waterways artificially created for navigating that have project depths of 12 feet or less.

2.0 Description of Screening Criteria for the Substantial Harm Flowchart

A facility that has the potential to cause substantial harm to the environment in the event of a discharge must prepare and submit a facility-specific response plan to EPA in accordance with Appendix F to this part. A description of the screening criteria for the substantial harm flowchart is provided below:

2.1 *Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfers of Oil.* A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. Daily oil transfer operations at these types of facilities occur between barges and vessels and onshore bulk storage tanks over open water. These facilities are located adjacent to navigable water.

2.2 *Lack of Adequate Secondary Containment at Facilities With a Total Oil Storage Capacity Greater Than or Equal to 1 Million Gallons.* Any facility with a total oil storage capacity greater than or equal to 1 million gallons without secondary containment sufficiently large to contain the capacity of the largest aboveground oil storage tank within each area plus sufficient freeboard to allow for precipitation must

submit a response plan to EPA. Secondary containment structures that meet the standard of good engineering practice for the purposes of this part include berms, dikes, retaining walls, curbing, culverts, gutters, or other drainage systems.

2.3 *Proximity to Fish and Wildlife and Sensitive Environments at Facilities With a Total Oil Storage Capacity Greater Than or Equal to 1 Million Gallons.* A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility could cause injury (as defined at 40 CFR 112.2) to fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan. Facility owners or operators must determine the distance at which an oil discharge could cause injury to fish and wildlife and sensitive environments using the appropriate formula presented in Attachment C–III to this appendix or a comparable formula.

2.4 *Proximity to Public Drinking Water Intakes at Facilities with a Total Oil Storage Capacity Greater than or Equal to 1 Million Gallons* A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c). The distance at which an oil discharge from an SPCC-regulated facility would shut down a public drinking water intake shall be calculated using the appropriate formula presented in Attachment C–III to this appendix or a comparable formula.

2.5 *Facilities That Have Experienced Reportable Oil Discharges in an Amount Greater Than or Equal to 10,000 Gallons Within the Past 5 Years and That Have a Total Oil Storage Capacity Greater Than or Equal to 1 Million Gallons.* A facility's oil spill history within the past 5 years shall be considered in the evaluation for substantial harm. Any facility with a total oil storage capacity greater than or equal to 1 million gallons that has experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the past 5 years must submit a response plan to EPA.

3.0 Certification for Facilities That Do Not Pose Substantial Harm

If the facility does not meet the substantial harm criteria listed in Attachment C–I to this appendix, the owner or operator shall complete and maintain at the facility the certification form contained in Attachment C–II to this appendix. In the event an alternative formula that is comparable to the one in this appendix is used to evaluate the substantial harm criteria, the owner or operator shall attach documentation to the certification form that demonstrates the reliability and analytical soundness of the comparable formula and shall notify the Regional Administrator in writing that an alternative formula was used.

4.0 References

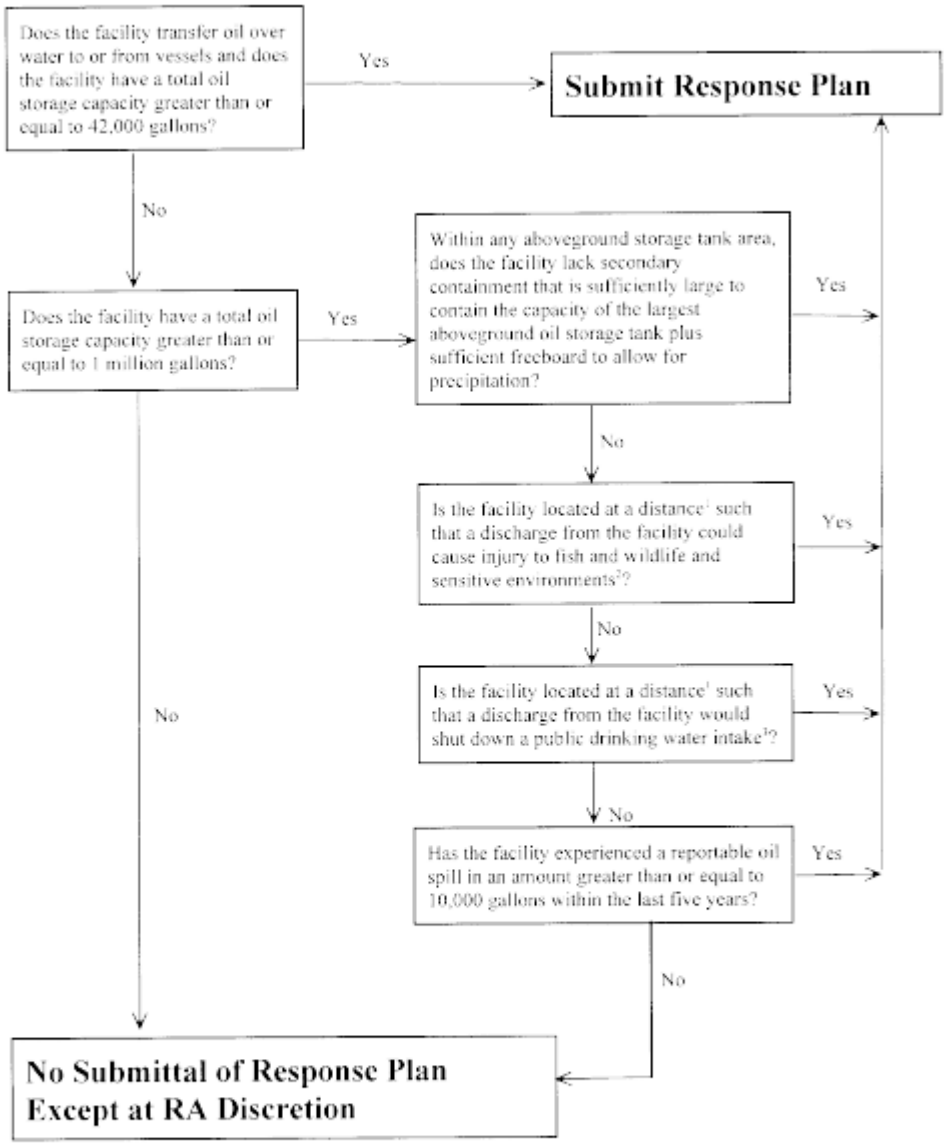
Chow, V.T. 1959. Open Channel Hydraulics. McGraw Hill.

USCG IFR (58 FR 7353, February 5, 1993). This document is available through EPA's rulemaking docket as noted in Appendix E to this part, section 13.

Attachments to Appendix C

Attachment C-I

Flowchart of Criteria for Substantial Harm



[1] Calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula.

[2] 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" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.

[3] Public drinking water intakes are analogous to public water systems as described at CFR 143.2(c).

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Attachment C-II—Certification of the Applicability of the Substantial Harm Criteria

Facility Name:_____
Facility Address:_____

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage

capacity greater than or equal to 42,000 gallons?

Yes ___ No ___

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

Yes ___ No ___

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

Yes ___ No ___

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2] ?

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

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

Yes ___ No ___

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

Yes ___ No ___

Certification

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

_____

Signature

_____

Name (please type or print)

_____

Title

_____

Date

Attachment C-III—Calculation of the Planning Distance

1.0 Introduction

1.1 The facility owner or operator must evaluate whether the facility is located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments or disrupt operations at a public drinking water intake. To quantify that distance, EPA considered oil transport mechanisms over land and on still, tidal influence, and moving navigable waters. EPA has determined that the primary concern for calculation of a planning distance is the transport of oil in navigable waters during adverse weather conditions. Therefore, two formulas have been developed to determine distances for planning purposes from the point of discharge at the facility to the potential site of impact on moving and still waters, respectively. The formula for oil transport on moving navigable water is based on the velocity of the water body and the time interval for arrival of response resources. The still water formula accounts for the spread of discharged oil over the surface of the water. The method to determine oil transport on tidal influence areas is based on the type of oil discharged and the distance down current during ebb tide and up current during flood tide to the point of maximum tidal influence.

1.2 EPA's formulas were designed to be simple to use. However, facility owners or operators may calculate planning distances using more sophisticated formulas, which take into account broader scientific or engineering principles, or local conditions. Such comparable formulas may result in different planning distances than EPA's formulas. In the event that an alternative formula that is comparable to one contained in this appendix is used to evaluate the criterion in 40 CFR 112.20(f)(1)(ii)(B) or (f)(1)(ii)(C), the owner or operator shall attach documentation to the response plan cover sheet contained in Appendix F to this part that demonstrates the reliability and analytical soundness of the alternative formula and shall notify the Regional Administrator in writing that an alternative formula was used.[1]

[1] For persistent oils or non-persistent oils, a worst case trajectory model (i.e., an alternative formula) may be substituted for the distance formulas described in still, moving, and tidal waters, subject to Regional Administrator's review of the model. An example of an alternative formula that is comparable to the one contained in this appendix would be a worst case trajectory calculation based on credible adverse winds, currents, and/or river stages, over a range of seasons, weather conditions, and river stages. Based on historical information or a spill trajectory model, the Agency may require that additional fish and wildlife and sensitive environments or public drinking water intakes also be protected.

1.3 A regulated facility may meet the criteria for the potential to cause substantial harm to the environment without having to perform a planning distance calculation. For facilities that meet the substantial harm criteria because of inadequate secondary containment or oil spill history, as listed in the flowchart in Attachment C–I to this appendix, calculation of the planning distance is unnecessary. For facilities that do not meet the substantial harm criteria for secondary containment or oil spill history as listed in the flowchart, calculation of a planning distance for proximity to fish and wildlife and sensitive environments and public drinking water intakes is required, unless it is clear without performing the calculation (e.g., the facility is located in a wetland) that these areas would be impacted.

1.4 A facility owner or operator who must perform a planning distance calculation on navigable water is only required to do so for the type of navigable water conditions (i.e., moving water, still water, or tidal-influenced water) applicable to the facility. If a facility owner or operator determines that more than one type of navigable water condition applies, then the facility owner or operator is required to perform a planning distance calculation for each navigable water type to determine the greatest single distance that oil may be transported. As a result, the final planning distance for oil transport on water shall be the greatest individual distance rather than a summation of each calculated planning distance.

1.5 The planning distance formula for transport on moving waterways contains three variables: the velocity of the navigable water (v), the response time interval (t), and a conversion factor (c). The velocity, v, is determined by using the Chezy-Manning equation, which, in this case, models the flood flow rate of water in open channels. The Chezy-Manning equation contains three variables which must be determined by facility owners or operators. Manning's Roughness Coefficient (for flood flow rates), n, can be determined from Table 1 of this attachment. The hydraulic radius, r, can be estimated using the

average mid-channel depth from charts provided by the sources listed in Table 2 of this attachment. The average slope of the river, s, can be determined using topographic maps that can be ordered from the U.S. Geological Survey, as listed in Table 2 of this attachment.

1.6 Table 3 of this attachment contains specified time intervals for estimating the arrival of response resources at the scene of a discharge. Assuming no prior planning, response resources should be able to arrive at the discharge site within 12 hours of the discovery of any oil discharge in Higher Volume Port Areas and within 24 hours in Great Lakes and all other river, canal, inland, and nearshore areas. The specified time intervals in Table 3 of Appendix C are to be used only to aid in the identification of whether a facility could cause substantial harm to the environment. Once it is determined that a plan must be developed for the facility, the owner or operator shall reference Appendix E to this part to determine appropriate resource levels and response times. The specified time intervals of this appendix include a 3-hour time period for deployment of boom and other response equipment. The Regional Administrator may identify additional areas as appropriate.

2.0 Oil Transport on Moving Navigable Waters

2.1 The facility owner or operator must use the following formula or a comparable formula as described in §112.20(a)(3) to calculate the planning distance for oil transport on moving navigable water:

d=v×t×c; where

d: the distance downstream from a facility within which fish and wildlife and sensitive environments could be injured or a public drinking water intake would be shut down in the event of an oil discharge (in miles);

v: the velocity of the river/navigable water of concern (in ft/sec) as determined by Chezy-Manning's equation (see below and Tables 1 and 2 of this attachment);

t: the time interval specified in Table 3 based upon the type of water body and location (in hours); and

c: constant conversion factor 0.68 secω mile/hrω ft (3600 sec/hr ÷ 5280 ft/mile).

2.2 Chezy-Manning's equation is used to determine velocity:

v=1.5/n×r2/3×s1/2; where

v=the velocity of the river of concern (in ft/sec);

n=Manning's Roughness Coefficient from Table 1 of this attachment;

r=the hydraulic radius; the hydraulic radius can be approximated for parabolic channels by multiplying the average mid-channel depth of the river (in feet) by 0.667 (sources for obtaining the mid-channel depth are listed in Table 2 of this attachment); and

s=the average slope of the river (unitless) obtained from U.S. Geological Survey topographic maps at the address listed in Table 2 of this attachment.

Table 1—Manning's Roughness Coefficient for Natural Streams

[Note: Coefficients are presented for high flow rates at or near flood stage.]

Stream description	Roughness coefficient (n)
Minor Streams (Top Width <100 ft.)	
Clean:	
Straight	0.03

Winding	0.04
Sluggish (Weedy, deep pools):	
No trees or brush	0.06
Trees and/or brush	0.10
Major Streams (Top Width >100 ft.)	
Regular section:	
(No boulders/brush)	0.035
Irregular section:	
(Brush)	0.05

Table 2—Sources of r and s for the Chezy-Manning Equation

All of the charts and related publications for navigational waters may be ordered from:

Distribution Branch

(N/CG33)

National Ocean Service

Riverdale, Maryland 20737–1199

Phone: (301) 436–6990

There will be a charge for materials ordered and a VISA or Mastercard will be accepted.

The mid-channel depth to be used in the calculation of the hydraulic radius (r) can be obtained directly from the following sources:

Charts of Canadian Coastal and Great Lakes Waters:

Canadian Hydrographic Service

Department of Fisheries and Oceans Institute

P.O. Box 8080

1675 Russell Road

Ottawa, Ontario KIG 3H6

Canada

Phone: (613) 998–4931

Charts and Maps of Lower Mississippi River

(Gulf of Mexico to Ohio River and St. Francis, White, Big Sunflower, Atchafalaya, and other rivers):

U.S. Army Corps of Engineers

Vicksburg District

P.O. Box 60

Vicksburg, Mississippi 39180

Phone: (601) 634–5000

Charts of Upper Mississippi River and Illinois Waterway to Lake Michigan:

U.S. Army Corps of Engineers

Rock Island District

P.O. Box 2004

Rock Island, Illinois 61204

Phone: (309) 794–5552

Charts of Missouri River:

U.S. Army Corps of Engineers

Omaha District

6014 U.S. Post Office and Courthouse

Omaha, Nebraska 68102

Phone: (402) 221–3900

Charts of Ohio River:

U.S. Army Corps of Engineers

Ohio River Division

P.O. Box 1159

Cincinnati, Ohio 45201

Phone: (513) 684–3002

Charts of Tennessee Valley Authority Reservoirs, Tennessee River and Tributaries:

Tennessee Valley Authority

Maps and Engineering Section

416 Union Avenue

Knoxville, Tennessee 37902

Phone: (615) 632–2921

Charts of Black Warrior River, Alabama River, Tombigbee River, Apalachicola River and Pearl River:

U.S. Army Corps of Engineers

Mobile District

P.O. Box 2288

Mobile, Alabama 36628–0001

Phone: (205) 690–2511

The average slope of the river (s) may be obtained from topographic maps:

U.S. Geological Survey

Map Distribution

Federal Center

Bldg. 41

Box 25286

Denver, Colorado 80225

Additional information can be obtained from the following sources:

1. The State's Department of Natural Resources (DNR) or the State's Aids to Navigation office;

2. A knowledgeable local marina operator; or

3. A knowledgeable local water authority (e.g., State water commission)

2.3 The average slope of the river (s) can be determined from the topographic maps using the following steps:

(1) Locate the facility on the map.

(2) Find the Normal Pool Elevation at the point of discharge from the facility into the water (A).

(3) Find the Normal Pool Elevation of the public drinking water intake or fish and wildlife and sensitive environment located downstream (B) (Note: The owner or operator should use a minimum of 20 miles downstream as a cutoff to obtain the average slope if the location of a specific public drinking water intake or fish and wildlife and sensitive environment is unknown).

(4) If the Normal Pool Elevation is not available, the elevation contours can be used to find the slope. Determine elevation of the water at the point of discharge from the facility (A). Determine the elevation of the water at the appropriate distance downstream (B). The formula presented below can be used to calculate the slope.

(5) Determine the distance (in miles) between the facility and the public drinking water intake or fish and wildlife and sensitive environments (C).

(6) Use the following formula to find the slope, which will be a unitless value: Average Slope=[(A–B) (ft)/C (miles)] × [1 mile/5280 feet]

2.4 If it is not feasible to determine the slope and mid-channel depth by the Chezy-Manning equation, then the river velocity can be approximated on- site. A specific length, such as 100 feet, can be marked

off along the shoreline. A float can be dropped into the stream above the mark, and the time required for the float to travel the distance can be used to determine the velocity in feet per second. However, this method will not yield an average velocity for the length of the stream, but a velocity only for the specific location of measurement. In addition, the flow rate will vary depending on weather conditions such as wind and rainfall. It is recommended that facility owners or operators repeat the measurement under a variety of conditions to obtain the most accurate estimate of the surface water velocity under adverse weather conditions.

2.5 The planning distance calculations for moving and still navigable waters are based on worst case discharges of persistent oils. Persistent oils are of concern because they can remain in the water for significant periods of time and can potentially exist in large quantities downstream. Owners or operators of facilities that store persistent as well as non-persistent oils may use a comparable formula. The volume of oil discharged is not included as part of the planning distance calculation for moving navigable waters. Facilities that will meet this substantial harm criterion are those with facility capacities greater than or equal to 1 million gallons. It is assumed that these facilities are capable of having an oil discharge of sufficient quantity to cause injury to fish and wildlife and sensitive environments or shut down a public drinking water intake. While owners or operators of transfer facilities that store greater than or equal to 42,000 gallons are not required to use a planning distance formula for purposes of the substantial harm criteria, they should use a planning distance calculation in the development of facility-specific response plans.

Table 3—Specified Time Intervals

Operating areas	Substantial harm planning time (hrs)
Higher volume port area	12 hour arrival+3 hour deployment=15 hours.
Great Lakes	24 hour arrival+3 hour deployment=27 hours.
All other rivers and canals, inland, and nearshore areas	24 hour arrival+3 hour deployment=27 hours.

2.6 *Example of the Planning Distance Calculation for Oil Transport on Moving Navigable Waters.* The following example provides a sample calculation using the planning distance formula for a facility discharging oil into the Monongahela River:

(1) Solve for v by evaluating n, r, and s for the Chezy-Manning equation:

Find the roughness coefficient, n, on Table 1 of this attachment for a regular section of a major stream with a top width greater than 100 feet. The top width of the river can be found from the topographic map.

n=0.035.

Find slope, s, where A=727 feet, B=710 feet, and C=25 miles.

Solving:

$s=[(727\ ft-1710\ ft)/25\ miles]\times[1\ mile/5280\ feet]=1.3\times10^{-4}$

The average mid-channel depth is found by averaging the mid-channel depth for each mile along the length of the river between the facility and the public drinking water intake or the fish or wildlife or sensitive environment (or 20 miles downstream if applicable). This value is multiplied by 0.667 to obtain the hydraulic radius. The mid-channel depth is found by obtaining values for r and s from the sources shown in Table 2 for the Monongahela River.

Solving:

r=0.667×20 feet=13.33 feet

Solve for v using:

$v=1.5/n\times r^{2/3}\times s^{1/2}$:

$v=[1.5/0.035]\times(13.33)^{2/3}\times(1.3\times10^{-4})^{1/2}$

v=2.73 feet/second

(2) Find t from Table 3 of this attachment. The Monongahela River's resource response time is 27 hours.

(3) Solve for planning distance, d:

d=v×t×c

d=(2.73 ft/sec)×(27 hours)×(0.68 secω mile/hrω ft)

d=50 miles

Therefore, 50 miles downstream is the appropriate planning distance for this facility.

3.0 Oil Transport on Still Water

3.1 For bodies of water including lakes or ponds that do not have a measurable velocity, the spreading of the oil over the surface must be considered. Owners or operators of facilities located next to still water bodies may use a comparable means of calculating the planning distance. If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable calculation must be attached to the response plan cover sheet.

3.2 *Example of the Planning Distance Calculation for Oil Transport on Still Water.* To assist those facilities which could potentially discharge into a still body of water, the following analysis was performed to provide an example of the type of formula that may be used to calculate the planning distance. For this example, a worst case discharge of 2,000,000 gallons is used.

(1) The surface area in square feet covered by an oil discharge on still water, A1, can be determined by the following formula,[2] where V is the volume of the discharge in gallons and C is a constant conversion factor:

[2] Huang, J.C. and Monastero, F.C., 1982. *Review of the State-of-the-Art of Oil Pollution Models* . Final report submitted to the American Petroleum Institute by Raytheon Ocean Systems, Co., East Providence, Rhode Island.

$A_1=10^5\times V3/4\times C$

C=0.1643

$A_1=10^5\times(2{,}000{,}000\text{ gallons})3/4\times(0.1643)$

$A_1=8.74\times10^8\text{ ft}^2$

(2) The spreading formula is based on the theoretical condition that the oil will spread uniformly in all directions forming a circle. In reality, the outfall of the discharge will direct the oil to the surface of the water where it intersects the shoreline. Although the oil will not spread uniformly in all directions, it is assumed that the discharge will spread from the shoreline into a semi-circle (this assumption does not account for winds or wave action).

(3) The area of a circle=† r^2

(4) To account for the assumption that oil will spread in a semi-circular shape, the area of a circle is divided by 2 and is designated as A_2.

$A_2=(\dagger r^2)/2$

Solving for the radius, r, using the relationship $A_1=A_2$: 8.74×10^8 ft^2 $=(\dagger^2)/2$

Therefore, r=23,586 ft

r=23,586 ft÷5,280 ft/mile=4.5 miles

Assuming a 20 knot wind under storm conditions:

1 knot=1.15 miles/hour

20 knots×1.15 miles/hour/knot=23 miles/hr

Assuming that the oil slick moves at 3 percent of the wind's speed:[3]

[3] *Oil Spill Prevention & Control.* National Spill Control School, Corpus Christi State University, Thirteenth Edition, May 1990.

23 miles/hour×0.03=0.69 miles/hour

(5) To estimate the distance that the oil will travel, use the times required for response resources to arrive at different geographic locations as shown in Table 3 of this attachment.

For example:

For Higher Volume Port Areas: 15 hrs×0.69 miles/hr=10.4 miles

For Great Lakes and all other areas: 27 hrs×0.69 miles/hr=18.6 miles

(6) The total distance that the oil will travel from the point of discharge, including the distance due to spreading, is calculated as follows:

Higher Volume Port Areas: d=10.4+4.5 miles or approximately 15 miles

Great Lakes and all other areas: d=18.6+4.5 miles or approximately 23 miles

4.0 Oil Transport on Tidal-Influence Areas

4.1 The planning distance method for tidal influence navigable water is based on worst case discharges of persistent and non-persistent oils. Persistent oils are of primary concern because they can potentially cause harm over a greater distance. For persistent oils discharged into tidal waters, the planning distance is 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.

4.2 For non-persistent oils discharged into tidal waters, the planning distance is 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.

4.3 *Example of Determining the Planning Distance for Two Types of Navigable Water Conditions.* Below is an example of how to determine the proper planning distance when a facility could impact two

types of navigable water conditions: moving water and tidal water.

(1) Facility X stores persistent oil and is located downstream from locks along a slow moving river which is affected by tides. The river velocity, v, is determined to be 0.5 feet/second from the Chezy-Manning equation used to calculate oil transport on moving navigable waters. The specified time interval, t, obtained from Table 3 of this attachment for river areas is 27 hours. Therefore, solving for the planning distance, d:

d=v×t×c

d=(0.5 ft/sec)×(27 hours)×(0.68 secmile/hrft)

d=9.18 miles.

(2) However, the planning distance for maximum tidal influence down current during ebb tide is 15 miles, which is greater than the calculated 9.18 miles. Therefore, 15 miles downstream is the appropriate planning distance for this facility.

5.0 Oil Transport Over Land

5.1 Facility owners or operators must evaluate the potential for oil to be transported over land to navigable waters of the United States. The owner or operator must evaluate the likelihood that portions of a worst case discharge would reach navigable waters via open channel flow or from sheet flow across the land, or be prevented from reaching navigable waters when trapped in natural or man-made depressions excluding secondary containment structures.

5.2 As discharged oil travels over land, it may enter a storm drain or open concrete channel intended for drainage. It is assumed that once oil reaches such an inlet, it will flow into the receiving navigable water. During a storm event, it is highly probable that the oil will either flow into the drainage structures or follow the natural contours of the land and flow into the navigable water. Expected minimum and maximum velocities are provided as examples of open concrete channel and pipe flow. The ranges listed below reflect minimum and maximum velocities used as design criteria.[4] The calculation below demonstrates that the time required for oil to travel through a storm drain or open concrete channel to navigable water is negligible and can be considered instantaneous. The velocities are:

[4] The design velocities were obtained from Howard County, Maryland Department of Public Works' Storm Drainage Design Manual.

For open concrete channels:

maximum velocity=25 feet per second

minimum velocity=3 feet per second

For storm drains:

maximum velocity=25 feet per second

minimum velocity=2 feet per second

5.3 Assuming a length of 0.5 mile from the point of discharge through an open concrete channel or concrete storm drain to a navigable water, the travel times (distance/velocity) are:

1.8 minutes at a velocity of 25 feet per second

14.7 minutes at a velocity of 3 feet per second

22.0 minutes for at a velocity of 2 feet per second

5.4 The distances that shall be considered to determine the planning distance are illustrated in Figure C-I of this attachment. The relevant distances can be described as follows:

D1=Distance from the nearest opportunity for discharge, X_1, to a storm drain or an open concrete channel leading to navigable water.

D2=Distance through the storm drain or open concrete channel to navigable water.

D3=Distance downstream from the outfall within which fish and wildlife and sensitive environments could be injured or a public drinking water intake would be shut down as determined by the planning distance formula.

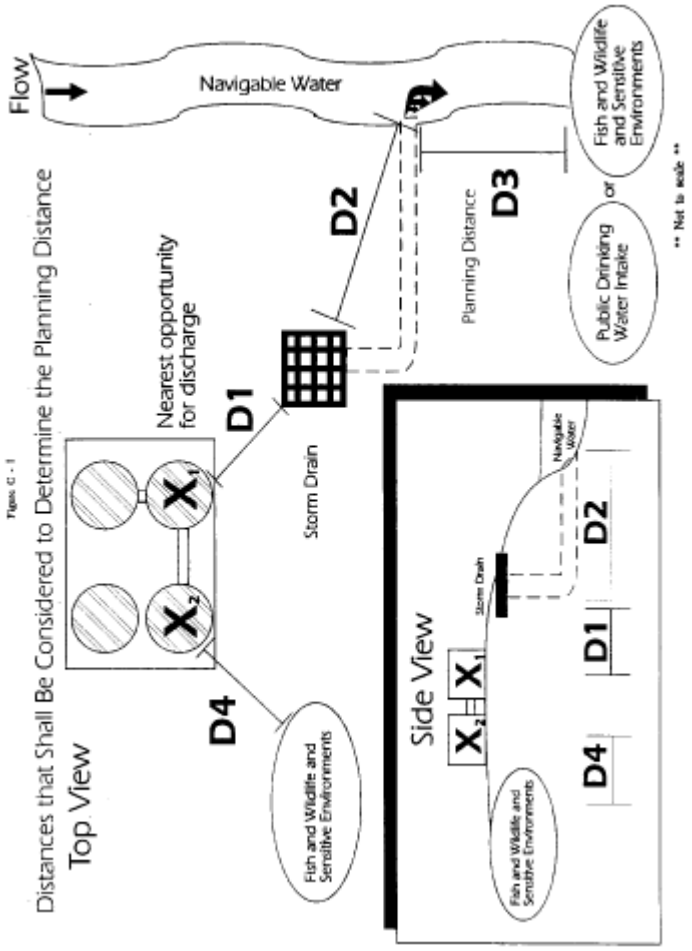
D4=Distance from the nearest opportunity for discharge, X_2, to fish and wildlife and sensitive environments not bordering navigable water.

5.5 A facility owner or operator whose nearest opportunity for discharge is located within 0.5 mile of a navigable water must complete the planning distance calculation (D3) for the type of navigable water near the facility or use a comparable formula.

5.6 A facility that is located at a distance greater than 0.5 mile from a navigable water must also calculate a planning distance (D3) if it is in close proximity (i.e., D1 is less than 0.5 mile and other factors are conducive to oil travel over land) to storm drains that flow to navigable waters. Factors to be considered in assessing oil transport over land to storm drains shall include the topography of the surrounding area, drainage patterns, man-made barriers (excluding secondary containment structures), and soil distribution and porosity. Storm drains or concrete drainage channels that are located in close proximity to the facility can provide a direct pathway to navigable waters, regardless of the length of the drainage pipe. If D1 is less than or equal to 0.5 mile, a discharge from the facility could pose substantial harm because the time to travel the distance from the storm drain to the navigable water (D2) is virtually instantaneous.

5.7 A facility's proximity to fish and wildlife and sensitive environments not bordering a navigable water, as depicted as D4 in Figure C–I of this attachment, must also be considered, regardless of the distance from the facility to navigable waters. Factors to be considered in assessing oil transport over land to fish and wildlife and sensitive environments should include the topography of the surrounding area, drainage patterns, man-made barriers (excluding secondary containment structures), and soil distribution and porosity.

5.8 If a facility is not found to pose substantial harm to fish and wildlife and sensitive environments not bordering navigable waters via oil transport on land, then supporting documentation should be maintained at the facility. However, such documentation should be submitted with the response plan if a facility is found to pose substantial harm.



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[59 FR 34102, July 1, 1994, as amended at 65 FR 40798, June 30, 2000; 67 FR 47152, July 17, 2002]

Appendix D to Part 112—Determination of a Worst Case Discharge Planning Volume

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1.0 Instructions

1.1 An owner or operator is required to complete this worksheet if the facility meets the criteria, as presented in Appendix C to this part, or it is determined by the RA that the facility could cause substantial harm to the environment. The calculation of a worst case discharge planning volume is used for emergency planning purposes, and is required in 40 CFR 112.20 for facility owners or operators who must prepare a response plan. When planning for the amount of resources and equipment necessary to respond to the worst case discharge planning volume, adverse weather conditions must be taken into consideration. An owner or operator is required to determine the facility's worst case discharge planning volume from either part A of this appendix for an onshore storage facility, or part B of this appendix for an onshore production facility. The worksheet considers the provision of adequate secondary containment at a facility.

1.2 For onshore storage facilities and production facilities, permanently manifolded oil storage tanks are defined as tanks that are designed, installed, and/or operated in such a manner that the multiple tanks function as one storage unit (i.e., multiple tank volumes are equalized). In a worst case discharge scenario, a single failure could cause the discharge of the contents of more than one tank. The owner or operator must provide evidence in the response plan that tanks with common piping or piping systems

are not operated as one unit. If such evidence is provided and is acceptable to the RA, the worst case discharge planning volume would be based on the capacity of the largest oil storage tank within a common secondary containment area or the largest oil storage tank within a single secondary containment area, whichever is greater. For permanently manifolded tanks that function as one oil storage unit, the worst case discharge planning volume would be based on the combined oil storage capacity of all manifolded tanks or the capacity of the largest single oil storage tank within a secondary containment area, whichever is greater. For purposes of this rule, permanently manifolded tanks that are separated by internal divisions for each tank are considered to be single tanks and individual manifolded tank volumes are not combined.

1.3 For production facilities, the presence of exploratory wells, production wells, and oil storage tanks must be considered in the calculation. Part B of this appendix takes these additional factors into consideration and provides steps for their inclusion in the total worst case discharge planning volume. Onshore oil production facilities may include all wells, flowlines, separation equipment, storage facilities, gathering lines, and auxiliary non-transportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator. Although a potential worst case discharge planning volume is calculated within each section of the worksheet, the final worst case amount depends on the risk parameter that results in the greatest volume.

1.4 Marine transportation-related transfer facilities that contain fixed aboveground onshore structures used for bulk oil storage are jointly regulated by EPA and the U.S. Coast Guard (USCG), and are termed "complexes." Because the USCG also requires response plans from transportation-related facilities to address a worst case discharge of oil, a separate calculation for the worst case discharge planning volume for USCG-related facilities is included in the USCG IFR (see Appendix E to this part, section 13, for availability). All complexes that are jointly regulated by EPA and the USCG must compare both calculations for worst case discharge planning volume derived by using the EPA and USCG methodologies and plan for whichever volume is greater.

PART A: WORST CASE DISCHARGE PLANNING VOLUME CALCULATION FOR ONSHORE STORAGE FACILITIES[1]

[1] "Storage facilities" represent all facilities subject to this part, excluding oil production facilities.

Part A of this worksheet is to be completed by the owner or operator of an SPCC-regulated facility (excluding oil production facilities) if the facility meets the criteria as presented in Appendix C to this part, or if it is determined by the RA that the facility could cause substantial harm to the environment. If you are the owner or operator of a production facility, please proceed to part B of this worksheet.

A.1 SINGLE-TANK FACILITIES

For facilities containing only one aboveground oil storage tank, the worst case discharge planning volume equals the capacity of the oil storage tank. If adequate secondary containment (sufficiently large to contain the capacity of the aboveground oil storage tank plus sufficient freeboard to allow for precipitation) exists for the oil storage tank, multiply the capacity of the tank by 0.8.

(1) FINAL WORST CASE VOLUME: ____ GAL

(2) Do not proceed further.

A.2 SECONDARY CONTAINMENT—MULTIPLE-TANK FACILITIES

Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* adequate secondary containment?[2]

[2] Secondary containment is described in 40 CFR part 112, subparts A through C. Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(1).

____ (Y/N)

A.2.1 If the answer is yes, the final worst case discharge planning volume equals the *total aboveground oil storage capacity at the facility.*

(1) FINAL WORST CASE VOLUME: ____ GAL

(2) Do not proceed further.

A.2.2 If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER “0” (zero).

____ GAL

A.2.3 Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, PLUS THE VOLUME FROM QUESTION A.2.2.

FINAL WORST CASE VOLUME:[3] ____ GAL

[3] All complexes that are jointly regulated by EPA and the USCG must also calculate the worst case discharge planning volume for the transportation-related portions of the facility and plan for whichever volume is greater.

PART B: WORST CASE DISCHARGE PLANNING VOLUME CALCULATION FOR ONSHORE PRODUCTION FACILITIES

Part B of this worksheet is to be completed by the owner or operator of an SPCC-regulated oil production facility if the facility meets the criteria presented in Appendix C to this part, or if it is determined by the RA that the facility could cause substantial harm. A production facility consists of all wells (producing and exploratory) and related equipment in a single geographical oil or gas field operated by a single operator.

B.1 SINGLE-TANK FACILITIES

B.1.1 For facilities containing only one aboveground oil storage tank, the worst case discharge planning volume equals the capacity of the aboveground oil storage tank plus the production volume of the well with the highest output at the facility. If adequate secondary containment (sufficiently large to contain the capacity of the aboveground oil storage tank plus sufficient freeboard to allow for precipitation) exists for the storage tank, multiply the capacity of the tank by 0.8.

B.1.2 For facilities with production wells producing by pumping, if the rate of the well with the highest output is known and the number of days the facility is unattended can be predicted, then the production volume is equal to the pumping rate of the well multiplied by the greatest number of days the facility is unattended.

B.1.3 If the pumping rate of the well with the highest output is estimated or the maximum number of days the facility is unattended is estimated, then the production volume is determined from the pumping rate of the well multiplied by 1.5 times the greatest number of days that the facility has been or is expected to be unattended.

B.1.4 Attachment D–1 to this appendix provides methods for calculating the production volume for exploratory wells and production wells producing under pressure.

(1) FINAL WORST CASE VOLUME: ____ GAL

(2) Do not proceed further.

B.2 SECONDARY CONTAINMENT—MULTIPLE-TANK FACILITIES

Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* adequate secondary containment?

___ (Y/N)

B.2.1 If the answer is yes, the final worst case volume equals the total aboveground oil storage capacity without adequate secondary containment plus the production volume of the well with the highest output at the facility.

(1) For facilities with production wells producing by pumping, if the rate of the well with the highest output is known and the number of days the facility is unattended can be predicted, then the production volume is equal to the pumping rate of the well multiplied by the greatest number of days the facility is unattended.

(2) If the pumping rate of the well with the highest output is estimated or the maximum number of days the facility is unattended is estimated, then the production volume is determined from the pumping rate of the well multiplied by 1.5 times the greatest number of days that the facility has been or is expected to be unattended.

(3) Attachment D–1 to this appendix provides methods for calculating the production volumes for exploratory wells and production wells producing under pressure.

(A) FINAL WORST CASE VOLUME: ____ GAL

(B) Do not proceed further.

B.2.2 If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER “0” (zero).

____ GAL

B.2.3 Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, plus the production volume of the well with the highest output, PLUS THE VOLUME FROM QUESTION B.2.2. Attachment D–1 provides methods for calculating the production volumes for exploratory wells and production wells producing under pressure.

(1) FINAL WORST CASE VOLUME:[4] ____ GAL

[4] All complexes that are jointly regulated by EPA and the USCG must also calculate the worst case discharge planning volume for the transportation-related portions of the facility and plan for whichever volume is greater.

(2) Do not proceed further.

Attachments to Appendix D

Attachment D–I—Methods To Calculate Production Volumes for Production Facilities With Exploratory Wells or Production Wells Producing Under Pressure

1.0 Introduction

The owner or operator of a production facility with exploratory wells or production wells producing under pressure shall compare the well rate of the highest output well (rate of well), in barrels per day, to the ability of response equipment and personnel to recover the volume of oil that could be discharged (rate of recovery), in barrels per day. The result of this comparison will determine the method used to calculate the production volume for the production facility. This production volume is to be used to calculate the worst case discharge planning volume in part B of this appendix.

2.0 Description of Methods

2.1 Method A

If the well rate would overwhelm the response efforts (i.e., rate of well/rate of recovery ≥1), then the production volume would be the 30-day forecasted well rate for a well 10,000 feet deep or less, or the 45-day forecasted well rate for a well deeper than 10,000 feet.

(1) For wells 10,000 feet deep or less:

Production volume=30 days × rate of well.

(2) For wells deeper than 10,000 feet:

Production volume=45 days × rate of well.

2.2 Method B

2.2.1 If the rate of recovery would be greater than the well rate (i.e., rate of well/rate of recovery <1), then the production volume would equal the sum of two terms:

Production volume=discharge volume$_1$+ discharge volume$_2$

2.2.2 The first term represents the volume of the oil discharged from the well between the time of the blowout and the time the response resources are on scene and recovering oil (discharge volume$_1$).

Discharge volume$_1$=(days unattended+days to respond) × (rate of well)

2.2.3 The second term represents the volume of oil discharged from the well after the response resources begin operating until the discharge is stopped, adjusted for the recovery rate of the response resources (discharge volume$_2$).

(1) For wells 10,000 feet deep or less:

Discharge volume$_2$=[30 days−(days unattended + days to respond)] × (rate of well) × (rate of well/rate of recovery)

(2) For wells deeper than 10,000 feet:

Discharge volume$_2$=[45 days−(days unattended + days to respond)] × (rate of well) × (rate of well/rate of recovery)

3.0 Example

3.1 A facility consists of two production wells producing under pressure, which are both less than 10,000 feet deep. The well rate of well A is 5 barrels per day, and the well rate of well B is 10 barrels per day. The facility is unattended for a maximum of 7 days. The facility operator estimates that it will take 2 days to have response equipment and personnel on scene and responding to a blowout, and that the projected rate of recovery will be 20 barrels per day.

(1) First, the facility operator determines that the highest output well is well B. The facility operator calculates the ratio of the rate of well to the rate of recovery:

10 barrels per day/20 barrels per day=0.5 Because the ratio is less than one, the facility operator will use Method B to calculate the production volume.

(2) The first term of the equation is:

Discharge volume$_1$=(7 days + 2 days) × (10 barrels per day)=90 barrels

(3) The second term of the equation is:

Discharge volume$_2$=[30 days—(7 days + 2 days)] × (10 barrels per day) × (0.5)=105 barrels

(4) Therefore, the production volume is:

Production volume=90 barrels + 105 barrels=195 barrels

3.2 If the recovery rate was 5 barrels per day, the ratio of rate of well to rate of recovery would be 2, so the facility operator would use Method A. The production volume would have been:

30 days × 10 barrels per day=300 barrels

[59 FR 34110, July 1, 1994; 59 FR 49006, Sept. 26, 1994, as amended at 65 FR 40800, June 30, 2000; 67 FR 47152, July 17, 2002]

Appendix E to Part 112—Determination and Evaluation of Required Response Resources for Facility Response Plans

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1.0 Purpose and Definitions

1.1 The purpose of this appendix is to describe the procedures to identify response resources to meet the requirements of §112.20. To identify response resources to meet the facility response plan requirements of 40 CFR 112.20(h), owners or operators shall follow this appendix or, where not appropriate, shall clearly demonstrate in the response plan why use of this appendix is not appropriate at the facility and make comparable arrangements for response resources.

1.2 Definitions.

1.2.1 *Animal fat* means a non-petroleum oil, fat, or grease of animal, fish, or marine mammal origin. Animal fats are further classified based on specific gravity as follows:

(1) Group A—specific gravity less than 0.8.

(2) Group B—specific gravity equal to or greater than 0.8 and less than 1.0.

(3) Group C—specific gravity equal to or greater than 1.0.

1.2.2 *Nearshore* is an operating area defined as extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending 12 miles from the line of demarcation (COLREG lines) defined in 49 CFR 80.740 and 80.850.

1.2.3 *Non-persistent oils* or *Group 1 oils* include:

(1) A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

(A) At least 50 percent of which by volume, distill at a temperature of 340 degrees C (645 degrees F); and

(B) At least 95 percent of which by volume, distill at a temperature of 370 degrees C (700 degrees F);

and

(2) A non-petroleum oil, other than an animal fat or vegetable oil, with a specific gravity less than 0.8.

1.2.4 *Non-petroleum oil* means oil of any kind that is not petroleum-based, including but not limited to: fats, oils, and greases of animal, fish, or marine mammal origin; and vegetable oils, including oils from seeds, nuts, fruits, and kernels.

1.2.5 *Ocean* means the nearshore area.

1.2.6 *Operating area* means Rivers and Canals, Inland, Nearshore, and Great Lakes geographic location(s) in which a facility is handling, storing, or transporting oil.

1.2.7 *Operating environment* means Rivers and Canals, Inland, Great Lakes, or Ocean. These terms are used to define the conditions in which response equipment is designed to function.

1.2.8 *Persistent oils* include:

(1) A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. Persistent oils are further classified based on specific gravity as follows:

(A) Group 2—specific gravity less than 0.85;

(B) Group 3—specific gravity equal to or greater than 0.85 and less than 0.95;

(C) Group 4—specific gravity equal to or greater than 0.95 and less than 1.0; or

(D) Group 5—specific gravity equal to or greater than 1.0.

(2) A non-petroleum oil, other than an animal fat or vegetable oil, with a specific gravity of 0.8 or greater. These oils are further classified based on specific gravity as follows:

(A) Group 2—specific gravity equal to or greater than 0.8 and less than 0.85;

(B) Group 3—specific gravity equal to or greater than 0.85 and less than 0.95;

(C) Group 4—specific gravity equal to or greater than 0.95 and less than 1.0; or

(D) Group 5—specific gravity equal to or greater than 1.0.

1.2.9 *Vegetable oil* means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels. Vegetable oils are further classified based on specific gravity as follows:

(1) Group A—specific gravity less than 0.8.

(2) Group B—specific gravity equal to or greater than 0.8 and less than 1.0.

(3) Group C—specific gravity equal to or greater than 1.0.

1.2.10 Other definitions are included in §112.2, section 1.1 of Appendix C, and section 3.0 of Appendix F.

2.0 Equipment Operability and Readiness

2.1 All equipment identified in a response plan must be designed to operate in the conditions expected in the facility's geographic area (i.e., operating environment). These conditions vary widely based on

location and season. Therefore, it is difficult to identify a single stockpile of response equipment that will function effectively in each geographic location (i.e., operating area).

2.2 Facilities handling, storing, or transporting oil in more than one operating environment as indicated in Table 1 of this appendix must identify equipment capable of successfully functioning in each operating environment.

2.3 When identifying equipment for the response plan (based on the use of this appendix), a facility owner or operator must consider the inherent limitations of the operability of equipment components and response systems. The criteria in Table 1 of this appendix shall be used to evaluate the operability in a given environment. These criteria reflect the general conditions in certain operating environments.

2.3.1 The Regional Administrator may require documentation that the boom identified in a facility response plan meets the criteria in Table 1 of this appendix. Absent acceptable documentation, the Regional Administrator may require that the boom be tested to demonstrate that it meets the criteria in Table 1 of this appendix. Testing must be in accordance with ASTM F 715, ASTM F 989, or other tests approved by EPA as deemed appropriate (see Appendix E to this part, section 13, for general availability of documents).

2.4 Table 1 of this appendix lists criteria for oil recovery devices and boom. All other equipment necessary to sustain or support response operations in an operating environment must be designed to function in the same conditions. For example, boats that deploy or support skimmers or boom must be capable of being safely operated in the significant wave heights listed for the applicable operating environment.

2.5 A facility owner or operator shall refer to the applicable Area Contingency Plan (ACP), where available, to determine if ice, debris, and weather-related visibility are significant factors to evaluate the operability of equipment. The ACP may also identify the average temperature ranges expected in the facility's operating area. All equipment identified in a response plan must be designed to operate within those conditions or ranges.

2.6 This appendix provides information on response resource mobilization and response times. The distance of the facility from the storage location of the response resources must be used to determine whether the resources can arrive on-scene within the stated time. A facility owner or operator shall include the time for notification, mobilization, and travel of resources identified to meet the medium and Tier 1 worst case discharge requirements identified in sections 4.3 and 9.3 of this appendix (for medium discharges) and section 5.3 of this appendix (for worst case discharges). The facility owner or operator must plan for notification and mobilization of Tier 2 and 3 response resources as necessary to meet the requirements for arrival on-scene in accordance with section 5.3 of this appendix. An on-water speed of 5 knots and a land speed of 35 miles per hour is assumed, unless the facility owner or operator can demonstrate otherwise.

2.7 In identifying equipment, the facility owner or operator shall list the storage location, quantity, and manufacturer's make and model. For oil recovery devices, the effective daily recovery capacity, as determined using section 6 of this appendix, must be included. For boom, the overall boom height (draft and freeboard) shall be included. A facility owner or operator is responsible for ensuring that the identified boom has compatible connectors.

3.0 Determining Response Resources Required for Small Discharges—Petroleum Oils and Non-Petroleum Oils Other Than Animal Fats and Vegetable Oils

3.1 A facility owner or operator shall identify sufficient response resources available, by contract or other approved means as described in §112.2, to respond to a small discharge. A small discharge is defined as any discharge volume less than or equal to 2,100 gallons, but not to exceed the calculated worst case discharge. The equipment must be designed to function in the operating environment at the point of expected use.

3.2 Complexes that are regulated by EPA and the United States Coast Guard (USCG) must also consider planning quantities for the transportation-related transfer portion of the facility.

3.2.1 *Petroleum oils.* The USCG planning level that corresponds to EPA's “small discharge” is termed “the average most probable discharge.” A USCG rule found at 33 CFR 154.1020 defines “the average

most probable discharge" as the lesser of 50 barrels (2,100 gallons) or 1 percent of the volume of the worst case discharge. Owners or operators of complexes that handle, store, or transport petroleum oils must compare oil discharge volumes for a small discharge and an average most probable discharge, and plan for whichever quantity is greater.

3.2.2 *Non-petroleum oils other than animal fats and vegetable oils.* Owners or operators of complexes that handle, store, or transport non-petroleum oils other than animal fats and vegetable oils must plan for oil discharge volumes for a small discharge. There is no USCG planning level that directly corresponds to EPA's "small discharge." However, the USCG (at 33 CFR 154.545) has requirements to identify equipment to contain oil resulting from an operational discharge.

3.3 The response resources shall, as appropriate, include:

3.3.1 One thousand feet of containment boom (or, for complexes with marine transfer components, 1,000 feet of containment boom or two times the length of the largest vessel that regularly conducts oil transfers to or from the facility, whichever is greater), and a means of deploying it within 1 hour of the discovery of a discharge;

3.3.2 Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a small discharge or greater which is available at the facility within 2 hours of the detection of an oil discharge; and

3.3.3 Oil storage capacity for recovered oily material indicated in section 12.2 of this appendix.

4.0 Determining Response Resources Required for Medium Discharges—Petroleum Oils and Non-Petroleum Oils Other Than Animal Fats and Vegetable Oils

4.1 A facility owner or operator shall identify sufficient response resources available, by contract or other approved means as described in §112.2, to respond to a medium discharge of oil for that facility. This will require response resources capable of containing and collecting up to 36,000 gallons of oil or 10 percent of the worst case discharge, whichever is less. All equipment identified must be designed to operate in the applicable operating environment specified in Table 1 of this appendix.

4.2 Complexes that are regulated by EPA and the USCG must also consider planning quantities for the transportation-related transfer portion of the facility.

4.2.1 *Petroleum oils.* The USCG planning level that corresponds to EPA's "medium discharge" is termed "the maximum most probable discharge." The USCG rule found at 33 CFR part 154 defines "the maximum most probable discharge" as a discharge of 1,200 barrels (50,400 gallons) or 10 percent of the worst case discharge, whichever is less. Owners or operators of complexes that handle, store, or transport petroleum oils must compare calculated discharge volumes for a medium discharge and a maximum most probable discharge, and plan for whichever quantity is greater.

4.2.2 *Non-petroleum oils other than animal fats and vegetable oils.* Owners or operators of complexes that handle, store, or transport non-petroleum oils other than animal fats and vegetable oils must plan for oil discharge volumes for a medium discharge. For non-petroleum oils, there is no USCG planning level that directly corresponds to EPA's "medium discharge."

4.3 Oil recovery devices identified to meet the applicable medium discharge volume planning criteria must be located such that they are capable of arriving on-scene within 6 hours in higher volume port areas and the Great Lakes and within 12 hours in all other areas. Higher volume port areas and Great Lakes areas are defined in section 1.1 of Appendix C to this part.

4.4 Because rapid control, containment, and removal of oil are critical to reduce discharge impact, the owner or operator must determine response resources using an effective daily recovery capacity for oil recovery devices equal to 50 percent of the planning volume applicable for the facility as determined in section 4.1 of this appendix. The effective daily recovery capacity for oil recovery devices identified in the plan must be determined using the criteria in section 6 of this appendix.

4.5 In addition to oil recovery capacity, the plan shall, as appropriate, identify sufficient quantity of containment boom available, by contract or other approved means as described in §112.2, to arrive

within the required response times for oil collection and containment and for protection of fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 13, for availability) and the applicable ACP. Although 40 CFR part 112 does not set required quantities of boom for oil collection and containment, the response plan shall identify and ensure, by contract or other approved means as described in §112.2, the availability of the quantity of boom identified in the plan for this purpose.

4.6 The plan must indicate the availability of temporary storage capacity to meet section 12.2 of this appendix. If available storage capacity is insufficient to meet this level, then the effective daily recovery capacity must be derated (downgraded) to the limits of the available storage capacity.

4.7 The following is an example of a medium discharge volume planning calculation for equipment identification in a higher volume port area: The facility's largest aboveground storage tank volume is 840,000 gallons. Ten percent of this capacity is 84,000 gallons. Because 10 percent of the facility's largest tank, or 84,000 gallons, is greater than 36,000 gallons, 36,000 gallons is used as the planning volume. The effective daily recovery capacity is 50 percent of the planning volume, or 18,000 gallons per day. The ability of oil recovery devices to meet this capacity must be calculated using the procedures in section 6 of this appendix. Temporary storage capacity available on-scene must equal twice the daily recovery capacity as indicated in section 12.2 of this appendix, or 36,000 gallons per day. This is the information the facility owner or operator must use to identify and ensure the availability of the required response resources, by contract or other approved means as described in §112.2. The facility owner shall also identify how much boom is available for use.

5.0 Determining Response Resources Required for the Worst Case Discharge to the Maximum Extent Practicable

5.1 A facility owner or operator shall identify and ensure the availability of, by contract or other approved means as described in §112.2, sufficient response resources to respond to the worst case discharge of oil to the maximum extent practicable. Sections 7 and 10 of this appendix describe the method to determine the necessary response resources. Worksheets are provided as Attachments E–1 and E–2 at the end of this appendix to simplify the procedures involved in calculating the planning volume for response resources for the worst case discharge.

5.2 Complexes that are regulated by EPA and the USCG must also consider planning for the worst case discharge at the transportation-related portion of the facility. The USCG requires that transportation-related facility owners or operators use a different calculation for the worst case discharge in the revisions to 33 CFR part 154. Owners or operators of complex facilities that are regulated by EPA and the USCG must compare both calculations of worst case discharge derived by EPA and the USCG and plan for whichever volume is greater.

5.3 Oil discharge response resources identified in the response plan and available, by contract or other approved means as described in §112.2, to meet the applicable worst case discharge planning volume must be located such that they are capable of arriving at the scene of a discharge within the times specified for the applicable response tier listed as follows

	Tier 1 (in hours)	Tier 2 (in hours)	Tier 3 (in hours)
Higher volume port areas	6	30	54
Great Lakes	12	36	60
All other river and canal, inland, and nearshore areas	12	36	60

The three levels of response tiers apply to the amount of time in which facility owners or operators must plan for response resources to arrive at the scene of a discharge to respond to the worst case discharge planning volume. For example, at a worst case discharge in an inland area, the first tier of response resources (*i.e.,* that amount of on-water and shoreline cleanup capacity necessary to respond to the

fraction of the worst case discharge as indicated through the series of steps described in sections 7.2 and 7.3 or sections 10.2 and 10.3 of this appendix) would arrive at the scene of the discharge within 12 hours; the second tier of response resources would arrive within 36 hours; and the third tier of response resources would arrive within 60 hours.

5.4 The effective daily recovery capacity for oil recovery devices identified in the response plan must be determined using the criteria in section 6 of this appendix. A facility owner or operator shall identify the storage locations of all response resources used for each tier. The owner or operator of a facility whose required daily recovery capacity exceeds the applicable contracting caps in Table 5 of this appendix shall, as appropriate, identify sources of additional equipment, their location, and the arrangements made to obtain this equipment during a response. The owner or operator of a facility whose calculated planning volume exceeds the applicable contracting caps in Table 5 of this appendix shall, as appropriate, identify sources of additional equipment equal to twice the cap listed in Tier 3 or the amount necessary to reach the calculated planning volume, whichever is lower. The resources identified above the cap shall be capable of arriving on-scene not later than the Tier 3 response times in section 5.3 of this appendix. No contract is required. While general listings of available response equipment may be used to identify additional sources (i.e., “public” resources vs. “private” resources), the response plan shall identify the specific sources, locations, and quantities of equipment that a facility owner or operator has considered in his or her planning. When listing USCG-classified oil spill removal organization(s) that have sufficient removal capacity to recover the volume above the response capacity cap for the specific facility, as specified in Table 5 of this appendix, it is not necessary to list specific quantities of equipment.

5.5 A facility owner or operator shall identify the availability of temporary storage capacity to meet section 12.2 of this appendix. If available storage capacity is insufficient, then the effective daily recovery capacity must be derated (downgraded) to the limits of the available storage capacity.

5.6 When selecting response resources necessary to meet the response plan requirements, the facility owner or operator shall, as appropriate, ensure that a portion of those resources is capable of being used in close-to-shore response activities in shallow water. For any EPA-regulated facility that is required to plan for response in shallow water, at least 20 percent of the on-water response equipment identified for the applicable operating area shall, as appropriate, be capable of operating in water of 6 feet or less depth.

5.7 In addition to oil spill recovery devices, a facility owner or operator shall identify sufficient quantities of boom that are available, by contract or other approved means as described in §112.2, to arrive on-scene within the specified response times for oil containment and collection. The specific quantity of boom required for collection and containment will depend on the facility-specific information and response strategies employed. A facility owner or operator shall, as appropriate, also identify sufficient quantities of oil containment boom to protect fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's “Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments” (see Appendix E to this part, section 13, for availability), and the applicable ACP. Refer to this guidance document for the number of days and geographic areas (*i.e.,* operating environments) specified in Table 2 and Table 6 of this appendix.

5.8 A facility owner or operator shall also identify, by contract or other approved means as described in §112.2, the availability of an oil spill removal organization(s) (as described in §112.2) capable of responding to a shoreline cleanup operation involving the calculated volume of oil and emulsified oil that might impact the affected shoreline. The volume of oil that shall, as appropriate, be planned for is calculated through the application of factors contained in Tables 2, 3, 6, and 7 of this appendix. The volume calculated from these tables is intended to assist the facility owner or operator to identify an oil spill removal organization with sufficient resources and expertise.

6.0 Determining Effective Daily Recovery Capacity for Oil Recovery Devices

6.1 Oil recovery devices identified by a facility owner or operator must be identified by the manufacturer, model, and effective daily recovery capacity. These capacities must be used to determine whether there is sufficient capacity to meet the applicable planning criteria for a small discharge, a medium discharge, and a worst case discharge to the maximum extent practicable.

6.2 To determine the effective daily recovery capacity of oil recovery devices, the formula listed in section 6.2.1 of this appendix shall be used. This formula considers potential limitations due to available daylight, weather, sea state, and percentage of emulsified oil in the recovered material. The RA may

assign a lower efficiency factor to equipment listed in a response plan if it is determined that such a reduction is warranted.

6.2.1 The following formula shall be used to calculate the effective daily recovery capacity:

R = T × 24 hours × E

where:

R—Effective daily recovery capacity;

T—Throughput rate in barrels per hour (nameplate capacity); and

E—20 percent efficiency factor (or lower factor as determined by the Regional Administrator).

6.2.2 For those devices in which the pump limits the throughput of liquid, throughput rate shall be calculated using the pump capacity.

6.2.3 For belt or moptype devices, the throughput rate shall be calculated using the speed of the belt or mop through the device, assumed thickness of oil adhering to or collected by the device, and surface area of the belt or mop. For purposes of this calculation, the assumed thickness of oil will be1/4inch.

6.2.4 Facility owners or operators that include oil recovery devices whose throughput is not measurable using a pump capacity or belt/mop speed may provide information to support an alternative method of calculation. This information must be submitted following the procedures in section 6.3.2 of this appendix.

6.3 As an alternative to section 6.2 of this appendix, a facility owner or operator may submit adequate evidence that a different effective daily recovery capacity should be applied for a specific oil recovery device. Adequate evidence is actual verified performance data in discharge conditions or tests using American Society of Testing and Materials (ASTM) Standard F 631–99, F 808–83 (1999), or an equivalent test approved by EPA as deemed appropriate (see Appendix E to this part, section 13, for general availability of documents).

6.3.1 The following formula must be used to calculate the effective daily recovery capacity under this alternative:

R = D × U

where:

R—Effective daily recovery capacity;

D—Average Oil Recovery Rate in barrels per hour (Item 26 in F 808–83; Item 13.2.16 in F 631–99; or actual performance data); and

U—Hours per day that equipment can operate under discharge conditions. Ten hours per day must be used unless a facility owner or operator can demonstrate that the recovery operation can be sustained for longer periods.

6.3.2 A facility owner or operator submitting a response plan shall provide data that supports the effective daily recovery capacities for the oil recovery devices listed. The following is an example of these calculations:

(1) A weir skimmer identified in a response plan has a manufacturer's rated throughput at the pump of 267 gallons per minute (gpm).

267 gpm=381 barrels per hour (bph)

R=381 bph×24 hr/day×0.2=1,829 barrels per day

(2) After testing using ASTM procedures, the skimmer's oil recovery rate is determined to be 220 gpm. The facility owner or operator identifies sufficient resources available to support operations for 12 hours per day.

220 gpm=314 bph

R=314 bph×12 hr/day=3,768 barrels per day

(3) The facility owner or operator will be able to use the higher capacity if sufficient temporary oil storage capacity is available. Determination of alternative efficiency factors under section 6.2 of this appendix or the acceptability of an alternative effective daily recovery capacity under section 6.3 of this appendix will be made by the Regional Administrator as deemed appropriate.

7.0 Calculating Planning Volumes for a Worst Case Discharge—Petroleum Oils and Non-Petroleum Oils Other Than Animal Fats and Vegetable Oils

7.1 A facility owner or operator shall plan for a response to the facility's worst case discharge. The planning for on-water oil recovery must take into account a loss of some oil to the environment due to evaporative and natural dissipation, potential increases in volume due to emulsification, and the potential for deposition of oil on the shoreline. The procedures for non-petroleum oils other than animal fats and vegetable oils are discussed in section 7.7 of this appendix.

7.2 The following procedures must be used by a facility owner or operator in determining the required on-water oil recovery capacity:

7.2.1 The following must be determined: the worst case discharge volume of oil in the facility; the appropriate group(s) for the types of oil handled, stored, or transported at the facility [persistent (Groups 2, 3, 4, 5) or non-persistent (Group 1)]; and the facility's specific operating area. See sections 1.2.3 and 1.2.8 of this appendix for the definitions of non-persistent and persistent oils, respectively. Facilities that handle, store, or transport oil from different oil groups must calculate each group separately, unless the oil group constitutes 10 percent or less by volume of the facility's total oil storage capacity. This information is to be used with Table 2 of this appendix to determine the percentages of the total volume to be used for removal capacity planning. Table 2 of this appendix divides the volume into three categories: oil lost to the environment; oil deposited on the shoreline; and oil available for on-water recovery.

7.2.2 The on-water oil recovery volume shall, as appropriate, be adjusted using the appropriate emulsification factor found in Table 3 of this appendix. Facilities that handle, store, or transport oil from different petroleum groups must compare the on-water recovery volume for each oil group (unless the oil group constitutes 10 percent or less by volume of the facility's total storage capacity) and use the calculation that results in the largest on-water oil recovery volume to plan for the amount of response resources for a worst case discharge.

7.2.3 The adjusted volume is multiplied by the on-water oil recovery resource mobilization factor found in Table 4 of this appendix from the appropriate operating area and response tier to determine the total on-water oil recovery capacity in barrels per day that must be identified or contracted to arrive on-scene within the applicable time for each response tier. Three tiers are specified. For higher volume port areas, the contracted tiers of resources must be located such that they are capable of arriving on-scene within 6 hours for Tier 1, 30 hours for Tier 2, and 54 hours for Tier 3 of the discovery of an oil discharge. For all other rivers and canals, inland, nearshore areas, and the Great Lakes, these tiers are 12, 36, and 60 hours.

7.2.4 The resulting on-water oil recovery capacity in barrels per day for each tier is used to identify response resources necessary to sustain operations in the applicable operating area. The equipment shall be capable of sustaining operations for the time period specified in Table 2 of this appendix. The facility owner or operator shall identify and ensure the availability, by contract or other approved means as described in §112.2, of sufficient oil spill recovery devices to provide the effective daily oil recovery capacity required. If the required capacity exceeds the applicable cap specified in Table 5 of this appendix, then a facility owner or operator shall ensure, by contract or other approved means as described in §112.2, only for the quantity of resources required to meet the cap, but shall identify

sources of additional resources as indicated in section 5.4 of this appendix. The owner or operator of a facility whose planning volume exceeded the cap in 1993 must make arrangements to identify and ensure the availability, by contract or other approved means as described in §112.2, for additional capacity to be under contract by 1998 or 2003, as appropriate. For a facility that handles multiple groups of oil, the required effective daily recovery capacity for each oil group is calculated before applying the cap. The oil group calculation resulting in the largest on-water recovery volume must be used to plan for the amount of response resources for a worst case discharge, unless the oil group comprises 10 percent or less by volume of the facility's total oil storage capacity.

7.3 The procedures discussed in sections 7.3.1–7.3.3 of this appendix must be used to calculate the planning volume for identifying shoreline cleanup capacity (for Group 1 through Group 4 oils).

7.3.1 The following must be determined: the worst case discharge volume of oil for the facility; the appropriate group(s) for the types of oil handled, stored, or transported at the facility [persistent (Groups 2, 3, or 4) or non-persistent (Group 1)]; and the geographic area(s) in which the facility operates (*i.e.* , operating areas). For a facility handling, storing, or transporting oil from different groups, each group must be calculated separately. Using this information, Table 2 of this appendix must be used to determine the percentages of the total volume to be used for shoreline cleanup resource planning.

7.3.2 The shoreline cleanup planning volume must be adjusted to reflect an emulsification factor using the same procedure as described in section 7.2.2 of this appendix.

7.3.3 The resulting volume shall be used to identify an oil spill removal organization with the appropriate shoreline cleanup capability.

7.4 A response plan must identify response resources with fire fighting capability. The owner or operator of a facility that handles, stores, or transports Group 1 through Group 4 oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The facility owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan must also identify an individual located at the facility to work with the fire department for Group 1 through Group 4 oil fires. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to a worst case scenario. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

7.5 The following is an example of the procedure described above in sections 7.2 and 7.3 of this appendix: A facility with a 270,000 barrel (11.3 million gallons) capacity for #6 oil (specific gravity 0.96) is located in a higher volume port area. The facility is on a peninsula and has docks on both the ocean and bay sides. The facility has four aboveground oil storage tanks with a combined total capacity of 80,000 barrels (3.36 million gallons) and no secondary containment. The remaining facility tanks are inside secondary containment structures. The largest aboveground oil storage tank (90,000 barrels or 3.78 million gallons) has its own secondary containment. Two 50,000 barrel (2.1 million gallon) tanks (that are not connected by a manifold) are within a common secondary containment tank area, which is capable of holding 100,000 barrels (4.2 million gallons) plus sufficient freeboard.

7.5.1 The worst case discharge for the facility is calculated by adding the capacity of all aboveground oil storage tanks without secondary containment (80,000 barrels) plus the capacity of the largest aboveground oil storage tank inside secondary containment. The resulting worst case discharge volume is 170,000 barrels or 7.14 million gallons.

7.5.2 Because the requirements for Tiers 1, 2, and 3 for inland and nearshore exceed the caps identified in Table 5 of this appendix, the facility owner will contract for a response to 10,000 barrels per day (bpd) for Tier 1, 20,000 bpd for Tier 2, and 40,000 bpd for Tier 3. Resources for the remaining 7,850 bpd for Tier 1, 9,750 bpd for Tier 2, and 7,600 bpd for Tier 3 shall be identified but need not be contracted for in advance. The facility owner or operator shall, as appropriate, also identify or contract for quantities of boom identified in their response plan for the protection of fish and wildlife and sensitive environments within the area potentially impacted by a worst case discharge from the facility. 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 13, for availability) and the applicable ACP. Attachment C–III to Appendix C provides a method for calculating a planning distance to fish and wildlife and sensitive environments and public drinking water intakes that may be impacted in the event of a worst case discharge.

7.6 The procedures discussed in sections 7.6.1–7.6.3 of this appendix must be used to determine appropriate response resources for facilities with Group 5 oils.

7.6.1 The owner or operator of a facility that handles, stores, or transports Group 5 oils shall, as appropriate, identify the response resources available by contract or other approved means, as described in §112.2. The equipment identified in a response plan shall, as appropriate, include:

(1) Sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column;

(2) Containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom;

(3) Dredges, pumps, or other equipment necessary to recover oil from the bottom and shoreline;

(4) Equipment necessary to assess the impact of such discharges; and

(5) Other appropriate equipment necessary to respond to a discharge involving the type of oil handled, stored,, or transported.

7.6.2 Response resources identified in a response plan for a facility that handles, stores, or transports Group 5 oils under section 7.6.1 of this appendix shall be capable of being deployed (on site) within 24 hours of discovery of a discharge to the area where the facility is operating.

7.6.3 A response plan must identify response resources with fire fighting capability. The owner or operator of a facility that handles, stores, or transports Group 5 oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The facility owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan shall also identify an individual located at the facility to work with the fire department for Group 5 oil fires. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to respond to a worst case discharge. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

7.7 *Non-petroleum oils other than animal fats and vegetable oils.* The procedures described in sections 7.7.1 through 7.7.5 of this appendix must be used to determine appropriate response plan development and evaluation criteria for facilities that handle, store, or transport non-petroleum oils other than animal fats and vegetable oils. Refer to section 11 of this appendix for information on the limitations on the use of chemical agents for inland and nearshore areas.

7.7.1 An owner or operator of a facility that handles, stores, or transports non-petroleum oils other than animal fats and vegetable oils must provide information in his or her plan that identifies:

(1) Procedures and strategies for responding to a worst case discharge to the maximum extent practicable; and

(2) Sources of the equipment and supplies necessary to locate, recover, and mitigate such a discharge.

7.7.2 An owner or operator of a facility that handles, stores, or transports non-petroleum oils other than animal fats and vegetable oils must ensure that any equipment identified in a response plan is capable of operating in the conditions expected in the geographic area(s) (*i.e.,* operating environments) in which the facility operates using the criteria in Table 1 of this appendix. When evaluating the operability of equipment, the facility owner or operator must consider limitations that are identified in the appropriate ACPs, including:

(1) Ice conditions;

(2) Debris;

(3) Temperature ranges; and

(4) Weather-related visibility.

7.7.3 The owner or operator of a facility that handles, stores, or transports non-petroleum oils other than animal fats and vegetable oils must identify the response resources that are available by contract or other approved means, as described in §112.2. The equipment described in the response plan shall, as appropriate, include:

(1) Containment boom, sorbent boom, or other methods for containing oil floating on the surface or to protect shorelines from impact;

(2) Oil recovery devices appropriate for the type of non-petroleum oil carried; and

(3) Other appropriate equipment necessary to respond to a discharge involving the type of oil carried.

7.7.4 Response resources identified in a response plan according to section 7.7.3 of this appendix must be capable of commencing an effective on-scene response within the applicable tier response times in section 5.3 of this appendix.

7.7.5 A response plan must identify response resources with fire fighting capability. The owner or operator of a facility that handles, stores, or transports non-petroleum oils other than animal fats and vegetable oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan must also identify an individual located at the facility to work with the fire department for fires of these oils. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to a worst case scenario. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

8.0 Determining Response Resources Required for Small Discharges—Animal Fats and Vegetable Oils

8.1 A facility owner or operator shall identify sufficient response resources available, by contract or other approved means as described in §112.2, to respond to a small discharge of animal fats or vegetable oils. A small discharge is defined as any discharge volume less than or equal to 2,100 gallons, but not to exceed the calculated worst case discharge. The equipment must be designed to function in the operating environment at the point of expected use.

8.2 Complexes that are regulated by EPA and the USCG must also consider planning quantities for the marine transportation-related portion of the facility.

8.2.1 The USCG planning level that corresponds to EPA's “small discharge” is termed “the average most probable discharge.” A USCG rule found at 33 CFR 154.1020 defines “the average most probable discharge” as the lesser of 50 barrels (2,100 gallons) or 1 percent of the volume of the worst case discharge. Owners or operators of complexes that handle, store, or transport animal fats and vegetable oils must compare oil discharge volumes for a small discharge and an average most probable discharge, and plan for whichever quantity is greater.

8.3 The response resources shall, as appropriate, include:

8.3.1 One thousand feet of containment boom (or, for complexes with marine transfer components, 1,000 feet of containment boom or two times the length of the largest vessel that regularly conducts oil transfers to or from the facility, whichever is greater), and a means of deploying it within 1 hour of the discovery of a discharge;

8.3.2 Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a small discharge or greater which is available at the facility within 2 hours of the detection of a discharge; and

8.3.3 Oil storage capacity for recovered oily material indicated in section 12.2 of this appendix.

9.0 Determining Response Resources Required for Medium Discharges—Animal Fats and Vegetable

Oils

9.1 A facility owner or operator shall identify sufficient response resources available, by contract or other approved means as described in §112.2, to respond to a medium discharge of animal fats or vegetable oils for that facility. This will require response resources capable of containing and collecting up to 36,000 gallons of oil or 10 percent of the worst case discharge, whichever is less. All equipment identified must be designed to operate in the applicable operating environment specified in Table 1 of this appendix.

9.2 Complexes that are regulated by EPA and the USCG must also consider planning quantities for the transportation-related transfer portion of the facility. Owners or operators of complexes that handle, store, or transport animal fats or vegetable oils must plan for oil discharge volumes for a medium discharge. For non-petroleum oils, there is no USCG planning level that directly corresponds to EPA's "medium discharge." Although the USCG does not have planning requirements for medium discharges, they do have requirements (at 33 CFR 154.545) to identify equipment to contain oil resulting from an operational discharge.

9.3 Oil recovery devices identified to meet the applicable medium discharge volume planning criteria must be located such that they are capable of arriving on-scene within 6 hours in higher volume port areas and the Great Lakes and within 12 hours in all other areas. Higher volume port areas and Great Lakes areas are defined in section 1.1 of Appendix C to this part.

9.4 Because rapid control, containment, and removal of oil are critical to reduce discharge impact, the owner or operator must determine response resources using an effective daily recovery capacity for oil recovery devices equal to 50 percent of the planning volume applicable for the facility as determined in section 9.1 of this appendix. The effective daily recovery capacity for oil recovery devices identified in the plan must be determined using the criteria in section 6 of this appendix.

9.5 In addition to oil recovery capacity, the plan shall, as appropriate, identify sufficient quantity of containment boom available, by contract or other approved means as described in §112.2, to arrive within the required response times for oil collection and containment and for protection of fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713–22, March 29, 1994) and the applicable ACP. Although 40 CFR part 112 does not set required quantities of boom for oil collection and containment, the response plan shall identify and ensure, by contract or other approved means as described in §112.2, the availability of the quantity of boom identified in the plan for this purpose.

9.6 The plan must indicate the availability of temporary storage capacity to meet section 12.2 of this appendix. If available storage capacity is insufficient to meet this level, then the effective daily recovery capacity must be derated (downgraded) to the limits of the available storage capacity.

9.7 The following is an example of a medium discharge volume planning calculation for equipment identification in a higher volume port area:

The facility's largest aboveground storage tank volume is 840,000 gallons. Ten percent of this capacity is 84,000 gallons. Because 10 percent of the facility's largest tank, or 84,000 gallons, is greater than 36,000 gallons, 36,000 gallons is used as the planning volume. The effective daily recovery capacity is 50 percent of the planning volume, or 18,000 gallons per day. The ability of oil recovery devices to meet this capacity must be calculated using the procedures in section 6 of this appendix. Temporary storage capacity available on-scene must equal twice the daily recovery capacity as indicated in section 12.2 of this appendix, or 36,000 gallons per day. This is the information the facility owner or operator must use to identify and ensure the availability of the required response resources, by contract or other approved means as described in §112.2. The facility owner shall also identify how much boom is available for use.

10.0 Calculating Planning Volumes for a Worst Case Discharge—Animal Fats and Vegetable Oils.

10.1 A facility owner or operator shall plan for a response to the facility's worst case discharge. The planning for on-water oil recovery must take into account a loss of some oil to the environment due to physical, chemical, and biological processes, potential increases in volume due to emulsification, and the potential for deposition of oil on the shoreline or on sediments. The response planning procedures for animal fats and vegetable oils are discussed in section 10.7 of this appendix. You may use alternate

response planning procedures for animal fats and vegetable oils if those procedures result in environmental protection equivalent to that provided by the procedures in section 10.7 of this appendix.

10.2 The following procedures must be used by a facility owner or operator in determining the required on-water oil recovery capacity:

10.2.1 The following must be determined: the worst case discharge volume of oil in the facility; the appropriate group(s) for the types of oil handled, stored, or transported at the facility (Groups A, B, C); and the facility's specific operating area. See sections 1.2.1 and 1.2.9 of this appendix for the definitions of animal fats and vegetable oils and groups thereof. Facilities that handle, store, or transport oil from different oil groups must calculate each group separately, unless the oil group constitutes 10 percent or less by volume of the facility's total oil storage capacity. This information is to be used with Table 6 of this appendix to determine the percentages of the total volume to be used for removal capacity planning. Table 6 of this appendix divides the volume into three categories: oil lost to the environment; oil deposited on the shoreline; and oil available for on-water recovery.

10.2.2 The on-water oil recovery volume shall, as appropriate, be adjusted using the appropriate emulsification factor found in Table 7 of this appendix. Facilities that handle, store, or transport oil from different groups must compare the on-water recovery volume for each oil group (unless the oil group constitutes 10 percent or less by volume of the facility's total storage capacity) and use the calculation that results in the largest on-water oil recovery volume to plan for the amount of response resources for a worst case discharge.

10.2.3 The adjusted volume is multiplied by the on-water oil recovery resource mobilization factor found in Table 4 of this appendix from the appropriate operating area and response tier to determine the total on-water oil recovery capacity in barrels per day that must be identified or contracted to arrive on-scene within the applicable time for each response tier. Three tiers are specified. For higher volume port areas, the contracted tiers of resources must be located such that they are capable of arriving on-scene within 6 hours for Tier 1, 30 hours for Tier 2, and 54 hours for Tier 3 of the discovery of a discharge. For all other rivers and canals, inland, nearshore areas, and the Great Lakes, these tiers are 12, 36, and 60 hours.

10.2.4 The resulting on-water oil recovery capacity in barrels per day for each tier is used to identify response resources necessary to sustain operations in the applicable operating area. The equipment shall be capable of sustaining operations for the time period specified in Table 6 of this appendix. The facility owner or operator shall identify and ensure, by contract or other approved means as described in §112.2, the availability of sufficient oil spill recovery devices to provide the effective daily oil recovery capacity required. If the required capacity exceeds the applicable cap specified in Table 5 of this appendix, then a facility owner or operator shall ensure, by contract or other approved means as described in §112.2, only for the quantity of resources required to meet the cap, but shall identify sources of additional resources as indicated in section 5.4 of this appendix. The owner or operator of a facility whose planning volume exceeded the cap in 1998 must make arrangements to identify and ensure, by contract or other approved means as described in §112.2, the availability of additional capacity to be under contract by 2003, as appropriate. For a facility that handles multiple groups of oil, the required effective daily recovery capacity for each oil group is calculated before applying the cap. The oil group calculation resulting in the largest on-water recovery volume must be used to plan for the amount of response resources for a worst case discharge, unless the oil group comprises 10 percent or less by volume of the facility's oil storage capacity.

10.3 The procedures discussed in sections 10.3.1 through 10.3.3 of this appendix must be used to calculate the planning volume for identifying shoreline cleanup capacity (for Groups A and B oils).

10.3.1 The following must be determined: the worst case discharge volume of oil for the facility; the appropriate group(s) for the types of oil handled, stored, or transported at the facility (Groups A or B); and the geographic area(s) in which the facility operates (i.e., operating areas). For a facility handling, storing, or transporting oil from different groups, each group must be calculated separately. Using this information, Table 6 of this appendix must be used to determine the percentages of the total volume to be used for shoreline cleanup resource planning.

10.3.2 The shoreline cleanup planning volume must be adjusted to reflect an emulsification factor using the same procedure as described in section 10.2.2 of this appendix.

10.3.3 The resulting volume shall be used to identify an oil spill removal organization with the

appropriate shoreline cleanup capability.

10.4 A response plan must identify response resources with fire fighting capability appropriate for the risk of fire and explosion at the facility from the discharge or threat of discharge of oil. The owner or operator of a facility that handles, stores, or transports Group A or B oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The facility owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan must also identify an individual to work with the fire department for Group A or B oil fires. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to a worst case scenario. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

10.5 The following is an example of the procedure described in sections 10.2 and 10.3 of this appendix. A facility with a 37.04 million gallon (881,904 barrel) capacity of several types of vegetable oils is located in the Inland Operating Area. The vegetable oil with the highest specific gravity stored at the facility is soybean oil (specific gravity 0.922, Group B vegetable oil). The facility has ten aboveground oil storage tanks with a combined total capacity of 18 million gallons (428,571 barrels) and without secondary containment. The remaining facility tanks are inside secondary containment structures. The largest aboveground oil storage tank (3 million gallons or 71,428 barrels) has its own secondary containment. Two 2.1 million gallon (50,000 barrel) tanks (that are not connected by a manifold) are within a common secondary containment tank area, which is capable of holding 4.2 million gallons (100,000 barrels) plus sufficient freeboard.

10.5.1 The worst case discharge for the facility is calculated by adding the capacity of all aboveground vegetable oil storage tanks without secondary containment (18.0 million gallons) plus the capacity of the largest aboveground storage tank inside secondary containment (3.0 million gallons). The resulting worst case discharge is 21 million gallons or 500,000 barrels.

10.5.2 With a specific worst case discharge identified, the planning volume for on-water recovery can be identified as follows:

Worst case discharge: 21 million gallons (500,000 barrels) of Group B vegetable oil

Operating Area: Inland

Planned percent recovered floating vegetable oil (from Table 6, column Nearshore/Inland/Great Lakes): Inland, Group B is 20%

Emulsion factor (from Table 7): 2.0

Planning volumes for on-water recovery: 21,000,000 gallons × 0.2 × 2.0 = 8,400,000 gallons or 200,000 barrels.

Determine required resources for on-water recovery for each of the three tiers using mobilization factors (from Table 4, column Inland/Nearshore/Great Lakes)

Inland Operating Area	Tier 1	Tier 2	Tier 3
Mobilization factor by which you multiply planning volume	.15	.25	.40
Estimated Daily Recovery Capacity (bbls)	30,000	50,000	80,000

10.5.3 Because the requirements for On-Water Recovery Resources for Tiers 1, 2, and 3 for Inland Operating Area exceed the caps identified in Table 5 of this appendix, the facility owner will contract for a response of 12,500 barrels per day (bpd) for Tier 1, 25,000 bpd for Tier 2, and 50,000 bpd for Tier 3. Resources for the remaining 17,500 bpd for Tier 1, 25,000 bpd for Tier 2, and 30,000 bpd for Tier 3 shall be identified but need not be contracted for in advance.

10.5.4 With the specific worst case discharge identified, the planning volume of onshore recovery can

be identified as follows:

Worst case discharge: 21 million gallons (500,000 barrels) of Group B vegetable oil

Operating Area: Inland

Planned percent recovered floating vegetable oil from onshore (from Table 6, column Nearshore/Inland/Great Lakes): Inland, Group B is 65%

Emulsion factor (from Table 7): 2.0

Planning volumes for shoreline recovery:

21,000,000 gallons × 0.65 × 2.0 = 27,300,000 gallons or 650,000 barrels

10.5.5 The facility owner or operator shall, as appropriate, also identify or contract for quantities of boom identified in the response plan for the protection of fish and wildlife and sensitive environments within the area potentially impacted by a worst case discharge from the facility. 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 13, for availability) and the applicable ACP. Attachment C–III to Appendix C provides a method for calculating a planning distance to fish and wildlife and sensitive environments and public drinking water intakes that may be adversely affected in the event of a worst case discharge.

10.6 The procedures discussed in sections 10.6.1 through 10.6.3 of this appendix must be used to determine appropriate response resources for facilities with Group C oils.

10.6.1 The owner or operator of a facility that handles, stores, or transports Group C oils shall, as appropriate, identify the response resources available by contract or other approved means, as described in §112.2. The equipment identified in a response plan shall, as appropriate, include:

(1) Sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column;

(2) Containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface or to reduce spreading on the bottom;

(3) Dredges, pumps, or other equipment necessary to recover oil from the bottom and shoreline;

(4) Equipment necessary to assess the impact of such discharges; and

(5) Other appropriate equipment necessary to respond to a discharge involving the type of oil handled, stored, or transported.

10.6.2 Response resources identified in a response plan for a facility that handles, stores, or transports Group C oils under section 10.6.1 of this appendix shall be capable of being deployed on scene within 24 hours of discovery of a discharge.

10.6.3 A response plan must identify response resources with fire fighting capability. The owner or operator of a facility that handles, stores, or transports Group C oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan shall also identify an individual located at the facility to work with the fire department for Group C oil fires. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to respond to a worst case discharge. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

10.7 The procedures described in sections 10.7.1 through 10.7.5 of this appendix must be used to determine appropriate response plan development and evaluation criteria for facilities that handle, store,

or transport animal fats and vegetable oils. Refer to section 11 of this appendix for information on the limitations on the use of chemical agents for inland and nearshore areas.

10.7.1 An owner or operator of a facility that handles, stores, or transports animal fats and vegetable oils must provide information in the response plan that identifies:

(1) Procedures and strategies for responding to a worst case discharge of animal fats and vegetable oils to the maximum extent practicable; and

(2) Sources of the equipment and supplies necessary to locate, recover, and mitigate such a discharge.

10.7.2 An owner or operator of a facility that handles, stores, or transports animal fats and vegetable oils must ensure that any equipment identified in a response plan is capable of operating in the geographic area(s) (*i.e.,* operating environments) in which the facility operates using the criteria in Table 1 of this appendix. When evaluating the operability of equipment, the facility owner or operator must consider limitations that are identified in the appropriate ACPs, including:

(1) Ice conditions;

(2) Debris;

(3) Temperature ranges; and

(4) Weather-related visibility.

10.7.3. The owner or operator of a facility that handles, stores, or transports animal fats and vegetable oils must identify the response resources that are available by contract or other approved means, as described in §112.2. The equipment described in the response plan shall, as appropriate, include:

(1) Containment boom, sorbent boom, or other methods for containing oil floating on the surface or to protect shorelines from impact;

(2) Oil recovery devices appropriate for the type of animal fat or vegetable oil carried; and

(3) Other appropriate equipment necessary to respond to a discharge involving the type of oil carried.

10.7.4 Response resources identified in a response plan according to section 10.7.3 of this appendix must be capable of commencing an effective on-scene response within the applicable tier response times in section 5.3 of this appendix.

10.7.5 A response plan must identify response resources with fire fighting capability. The owner or operator of a facility that handles, stores, or transports animal fats and vegetable oils that does not have adequate fire fighting resources located at the facility or that cannot rely on sufficient local fire fighting resources must identify adequate fire fighting resources. The owner or operator shall ensure, by contract or other approved means as described in §112.2, the availability of these resources. The response plan shall also identify an individual located at the facility to work with the fire department for animal fat and vegetable oil fires. This individual shall also verify that sufficient well-trained fire fighting resources are available within a reasonable response time to respond to a worst case discharge. The individual may be the qualified individual identified in the response plan or another appropriate individual located at the facility.

11.0 Determining the Availability of Alternative Response Methods

11.1 For chemical agents to be identified in a response plan, they must be on the NCP Product Schedule that is maintained by EPA. (Some States have a list of approved dispersants for use within State waters. Not all of these State-approved dispersants are listed on the NCP Product Schedule.)

11.2 Identification of chemical agents in the plan does not imply that their use will be authorized. Actual authorization will be governed by the provisions of the NCP and the applicable ACP.

12.0 Additional Equipment Necessary to Sustain Response Operations

12.1 A facility owner or operator shall identify sufficient response resources available, by contract or other approved means as described in §112.2, to respond to a medium discharge of animal fats or vegetables oils for that facility. This will require response resources capable of containing and collecting up to 36,000 gallons of oil or 10 percent of the worst case discharge, whichever is less. All equipment identified must be designed to operate in the applicable operating environment specified in Table 1 of this appendix.

12.2 A facility owner or operator shall evaluate the availability of adequate temporary storage capacity to sustain the effective daily recovery capacities from equipment identified in the plan. Because of the inefficiencies of oil spill recovery devices, response plans must identify daily storage capacity equivalent to twice the effective daily recovery capacity required on-scene. This temporary storage capacity may be reduced if a facility owner or operator can demonstrate by waste stream analysis that the efficiencies of the oil recovery devices, ability to decant waste, or the availability of alternative temporary storage or disposal locations will reduce the overall volume of oily material storage.

12.3 A facility owner or operator shall ensure that response planning includes the capability to arrange for disposal of recovered oil products. Specific disposal procedures will be addressed in the applicable ACP.

13.0 References and Availability

13.1 All materials listed in this section are part of EPA's rulemaking docket and are located in the Superfund Docket, 1235 Jefferson Davis Highway, Crystal Gateway 1, Arlington, Virginia 22202, Suite 105 (Docket Numbers SPCC–2P, SPCC–3P, and SPCC–9P). The docket is available for inspection between 9 a.m. and 4 p.m., Monday through Friday, excluding Federal holidays.

Appointments to review the docket can be made by calling 703–603–9232. Docket hours are subject to change. As provided in 40 CFR part 2, a reasonable fee may be charged for copying services.

13.2 The docket will mail copies of materials to requestors who are outside the Washington, DC metropolitan area. Materials may be available from other sources, as noted in this section. As provided in 40 CFR part 2, a reasonable fee may be charged for copying services. The RCRA/Superfund Hotline at 800–424–9346 may also provide additional information on where to obtain documents. To contact the RCRA/Superfund Hotline in the Washington, DC metropolitan area, dial 703–412–9810. The Telecommunications Device for the Deaf (TDD) Hotline number is 800–553–7672, or, in the Washington, DC metropolitan area, 703–412–3323.

13.3 Documents

(1) National Preparedness for Response Exercise Program (PREP). The PREP draft guidelines are available from United States Coast Guard Headquarters (G-MEP-4), 2100 Second Street, SW., Washington, DC 20593. (See 58 FR 53990–91, October 19, 1993, Notice of Availability of PREP Guidelines).

(2) “Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments (published in the Federal Register by DOC/NOAA at 59 FR 14713–22, March 29, 1994.). The guidance is available in the Superfund Docket (see sections 13.1 and 13.2 of this appendix).

(3) ASTM Standards. ASTM F 715, ASTM F 989, ASTM F 631–99, ASTM F 808–83 (1999). The ASTM standards are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959.

(4) Response Plans for Marine Transportation-Related Facilities, Interim Final Rule. Published by USCG, DOT at 58 FR 7330–76, February 5, 1993.

Table 1 to Appendix E—Response Resource Operating Criteria

Oil Recovery Devices		

Operating environment	Significant wave height[1]	Sea state
Rivers and Canals	≤ 1 foot	1
Inland	≤ 3 feet	2
Great Lakes	≤ 4 feet	2–3
Ocean	≤ 6 feet	3–4

Boom				
	Use			
Boom property	Rivers and canals	Inland	Great Lakes	Ocean
Significant Wave Height[1]	≤ 1	≤ 3	≤ 4	≤ 6
Sea State	1	2	2–3	3–4
Boom height—inches (draft plus freeboard)	6–18	18–42	18–42	≥42
Reserve Buoyancy to Weight Ratio	2:1	2:1	2:1	3:1 to 4:1
Total Tensile Strength—pounds	4,500	15,000–20,000	15,000–20,000	≥20,000
Skirt Fabric Tensile Strength—pounds	200	300	300	500
Skirt Fabric Tear Strength—pounds	100	100	100	125

[1]Oil recovery devices and boom *shall* be at least capable of operating in wave heights up to and including the values listed in Table 1 for each operating environment.

Table 2 to Appendix E—Removal Capacity Planning Table for Petroleum Oils

Spill location	Rivers and canals			Nearshore/Inland/Great Lakes		
Sustainability of on-water oil recovery	3 days			4 days		
Oil group[1]	Percent natural dissipation	Percent recovered floating oil	Percent oil onshore	Percent natural dissipation	Percent recovered floating oil	Percent oil onshore
1—Non-persistent oils	80	10	10	80	20	10
2—Light crudes	40	15	45	50	50	30
3—Medium crudes and fuels	20	15	65	30	50	50
4—Heavy crudes and	5	20	75	10	50	70

fuels						

[1]The response resource considerations for non-petroleum oils other than animal fats and vegetable oils are outlined in section 7.7 of this appendix.

Note: Group 5 oils are defined in section 1.2.8 of this appendix; the response resource considerations are outlined in section 7.6 of this appendix.

Table 3 to Appendix E—Emulsification Factors for Petroleum Oil Groups[1]

Non-Persistent Oil:	
Group 1	1.0
Persistent Oil:	
Group 2	1.8
Group 3	2.0
Group 4	1.4
Group 5 oils are defined in section 1.2.7 of this appendix; the response resource considerations are outlined in section 7.6 of this appendix.	

[1]See sections 1.2.2 and 1.2.7 of this appendix for group designations for non-persistent and persistent oils, respectively.

Table 4 to Appendix E—On-Water Oil Recovery Resource Mobilization Factors

Operating area	Tier 1	Tier 2	Tier 3
Rivers and Canals	0.30	0.40	0.60
Inland/Nearshore Great Lakes	0.15	0.25	0.40

Note: These mobilization factors are for total resources mobilized, not incremental response resources.

Table 5 to Appendix E—Response Capability Caps by Operating Area

	Tier 1	Tier 2	Tier 3
February 18, 1993:			
All except Rivers & Canals, Great Lakes	10K bbls/day	20K bbls/day	40K bbls/day.
Great Lakes	5K bbls/day	10K bbls/day	20K bbls/day.
Rivers & Canals	1.5K bbls/day	3.0K bbls/day	6.0K bbls/day.
February 18, 1998:			
All except Rivers & Canals, Great Lakes	12.5K bbls/day	25K bbls/day	50K bbls/day.
Great Lakes	6.35K bbls/day	12.3K bbls/day	25K bbls/day.

Rivers & Canals	1.875K bbls/day	3.75K bbls/day	7.5K bbls/day.
February 18, 2003:			
All except Rivers & Canals, Great Lakes	TBD	TBD	TBD.
Great Lakes	TBD	TBD	TBD.
Rivers & Canals	TBD	TBD	TBD.

Note: The caps show cumulative overall effective daily recovery capacity, not incremental increases.

TBD=To Be Determined.

Table 6 to Appendix E—Removal Capacity Planning Table for Animal Fats and Vegetable Oils

Spill location	Rivers and canals			Nearshore/Inland/Great Lakes		
Sustainability of on-water oil recovery	3 days			4 days		
Oil group[1]	Percent natural loss	Percent recovered floating oil	Percent recovered oil from onshore	Percent natural loss	Percent recovered floating oil	Percent recovered oil from onshore
Group A	40	15	45	50	20	30
Group B	20	15	65	30	20	50

[1]Substances with a specific gravity greater than 1.0 generally sink below the surface of the water. Response resource considerations are outlined in section 10.6 of this appendix. The owner or operator of the facility is responsible for determining appropriate response resources for Group C oils including locating oil on the bottom or suspended in the water column; containment boom or other appropriate methods for containing oil that may remain floating on the surface; and dredges, pumps, or other equipment to recover animal fats or vegetable oils from the bottom and shoreline.

Note: Group C oils are defined in sections 1.2.1 and 1.2.9 of this appendix; the response resource procedures are discussed in section 10.6 of this appendix.

Table 7 to Appendix E—Emulsification Factors for Animal Fats and Vegetable Oils

Oil Group [1]:	
Group A	1.0
Group B	2.0

[1]Substances with a specific gravity greater than 1.0 generally sink below the surface of the water. Response resource considerations are outlined in section 10.6 of this appendix. The owner or operator of the facility is responsible for determining appropriate response resources for Group C oils including locating oil on the bottom or suspended in the water column; containment boom or other appropriate methods for containing oil that may remain floating on the surface; and dredges, pumps, or other equipment to recover animal fats or vegetable oils from the bottom and shoreline.

Note: Group C oils are defined in sections 1.2.1 and 1.2.9 of this appendix; the response resource procedures are discussed in section 10.6 of this appendix.

Attachments to Appendix E

Attachment E-1 --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Petroleum Oils

Part I Background Information

Step (A) Calculate Worst Case Discharge in barrels (Appendix D) [ ] (A)

Step (B) Oil Group[1] (Table 3 and section 1.2 of this appendix) . [ ]

Step (C) Operating Area (choose one) . . . . [ ] Near shore/Inland Great Lakes [ ] or Rivers and Canals

Step (D) Percentages of Oil (Table 2 of this appendix)

Percent Lost to Natural Dissipation	Percent Recovered Floating Oil	Percent Oil Onshore
[ ] (D1)	[ ] (D2)	[ ] (D3)

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step(A)}}{100}$ [ ] (E1)

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$ . . . . [ ] (E2)

Step (F) Emulsification Factor (Table 3 of this appendix) . . . . . [ ] (F)

Step (G) On-Water Oil Recovery Resource Mobilization Factor (Table 4 of this appendix)

Tier 1	Tier 2	Tier 3
[ ] (G1)	[ ] (G2)	[ ] (G3)

[1] A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less by volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

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Attachment E-1 (continued) --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Petroleum Oils

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels) . . . . . | | Step (E2) x Step (F)

Part IV On-Water Response Capacity By Operating Area
(Table 5 of this appendix)
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrel.

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Attachment E-1 Example --
Worksheet to Plan Volume of Response Resources for Worst Case Discharge - Petroleum Oils

Part I Background Information

Step (A) Calculate Worst Case Discharge in barrels (Appendix D) | 170,000 | (A)

Step (B) Oil Group[1] (Table 3 and section 1.2 of this appendix) . | 4

Step (C) Operating Area (choose one) . . | X | Near shore/Inland Great Lakes | | or Rivers and Canals

Step (D) Percentages of Oil (Table 2 of this appendix)

Percent Lost to Natural Dissipation	Percent Recovered Floating Oil	Percent Oil Onshore
10	50	70
(D1)	(D2)	(D3)

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step (A)}}{100}$ | 85,000 (E1)

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$ | 119,000 (E2)

Step (F) Emulsification Factor (Table 3 of this appendix) . . . . . | 1.4 (F)

Step (G) On-Water Oil Recovery Resource Mobilization Factor (Table 4 of this appendix)

Tier 1	Tier 2	Tier 3
0.15	0.25	0.40
(G1)	(G2)	(G3)

[1] A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less by volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

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Attachment E-1 Example (continued) --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Petroleum Oils

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
17,850	29,750	47,600
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels) 166,600
Step (E2) x Step (F)

Part IV On-Water Response Capacity By Operating Area
(Table 5 of this appendix)
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
10,000	20,000	40,000
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
7,850	9,750	7,600
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrel.

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Attachment E-2 --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Animal Fats and Vegetable Oils

Part I Background Information

Step (A) Calculate Worst Case Discharge in barrels (Appendix D) [ ] (A)

Step (B) Oil Group[1] (Table 7 and section 1.2 of this appendix) . [ ]

Step (C) Operating Area (choose one) . . . . [ ] Near shore/Inland Great Lakes [ ] or Rivers and Canals

Step (D) Percentages of Oil (Table 6 of this appendix)

Percent Lost to Natural Dissipation	Percent Recovered Floating Oil	Percent Oil Onshore
[ ] (D1)	[ ] (D2)	[ ] (D3)

Step (E1) On-Water Oil Recovery Step (D2) x Step (A) / 100 [ ] (E1)

Step (E2) Shoreline Recovery Step (D3) x Step (A) / 100 . . . [ ] (E2)

Step (F) Emulsification Factor (Table 7 of this appendix) . . . . . [ ] (F)

Step (G) On-Water Oil Recovery Resource Mobilization Factor (Table 4 of this appendix)

Tier 1	Tier 2	Tier 3
[ ] (G1)	[ ] (G2)	[ ] (G3)

[1] A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less by volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

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Attachment E-2 (continued) --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Animal Fats and Vegetable Oils

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels) . . . . [ ]
Step (E2) x Step (F)

Part IV On-Water Response Capacity By Operating Area
(Table 5 of this appendix)
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrel.

Attachment E-2 Example --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Animal Fats and Vegetable Oils

Part I Background Information

Step (A) Calculate Worst Case Discharge in barrels (Appendix D) . . . . . 500,000 (A)

Step (B) Oil Group[1] (Table 7 and section 1.2 of this appendix) . . . . . B

Step (C) Operating Area (choose one) [X] Near shore/Inl and Great Lakes [ ] or Rivers and Canals

Step (D) Percentages of Oil (Table 6 of this appendix)

Percent Lost to Natural Dissipation	Percent Recovered Floating Oil	Percent Oil Onshore
30 (D1)	20 (D2)	50 (D3)

Step (E1) On-Water Oil Recovery $\frac{\text{Step (D2) x Step (A)}}{100}$ 100,000 (E1)

Step (E2) Shoreline Recovery $\frac{\text{Step (D3) x Step (A)}}{100}$ 250,000 (E2)

Step (F) Emulsification Factor (Table 7 of this appendix) . . . . . 2.0 (F)

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Step (G) On-Water Oil Recovery Resource Mobilization Factor
(Table 4 of this appendix)

Tier 1	Tier 2	Tier 3
0.15	0.25	0.40
(G1)	(G2)	(G3)

[1] A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that constitute 10 percent or less by volume of the total oil storage capacity at the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

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Attachment E-2 Example (continued) --
Worksheet to Plan Volume of Response Resources
for Worst Case Discharge - Animal Fats and Vegetable Oils (continued)

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
30,000	50,000	80,000
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels) 500,000
Step (E2) x Step (F)

Part IV On-Water Response Capacity By Operating Area
(Table 5 of this appendix)
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
12,500	25,000	50,000
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
17,500	25,000	30,000
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrel.

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[59 FR 34111, July 1, 1994; 59 FR 49006, Sept. 26, 1994, as amended at 65 FR 40806, 40807, June 30, 2000; 65 FR 47325, Aug. 2, 2000; 66 FR 34560, June 29, 2001]

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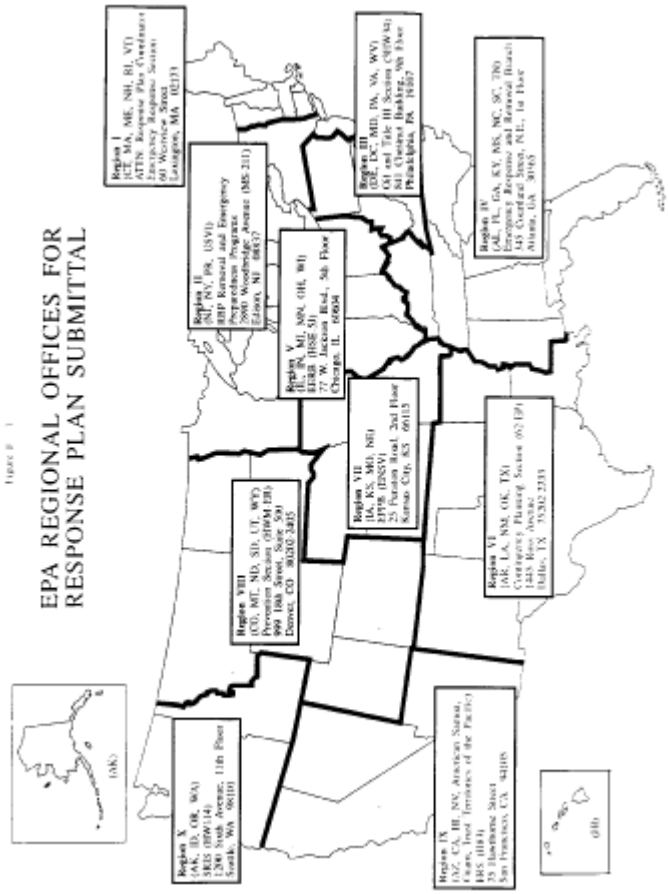
1.0 Model Facility-Specific Response Plan

(A) Owners or operators of facilities regulated under this part which pose a threat of substantial harm to the environment by discharging oil into or on navigable waters or adjoining shorelines are required to prepare and submit facility-specific response plans to EPA in accordance with the provisions in this appendix. This appendix further describes the required elements in §112.20(h).

(B) Response plans must be sent to the appropriate EPA Regional office. Figure F–1 of this Appendix lists each EPA Regional office and the address where owners or operators must submit their response plans. Those facilities deemed by the Regional Administrator (RA) to pose a threat of significant and substantial harm to the environment will have their plans reviewed and approved by EPA. In certain cases, information required in the model response plan is similar to information currently maintained in the facility's Spill Prevention, Control, and Countermeasures (SPCC) Plan as required by 40 CFR 112.3. In these cases, owners or operators may reproduce the information and include a photocopy in the response plan.

(C) A complex may develop a single response plan with a set of core elements for all regulating agencies and separate sections for the non-transportation-related and transportation-related components, as described in §112.20(h). Owners or operators of large facilities that handle, store, or transport oil at more than one geographically distinct location (e.g., oil storage areas at opposite ends of a single, continuous parcel of property) shall, as appropriate, develop separate sections of the response plan for each storage area.



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1.1 Emergency Response Action Plan

Several sections of the response plan shall be co-located for easy access by response personnel during an actual emergency or oil discharge. This collection of sections shall be called the Emergency Response Action Plan. The Agency intends that the Action Plan contain only as much information as is necessary to combat the discharge and be arranged so response actions are not delayed. The Action Plan may be arranged in a number of ways. For example, the sections of the Emergency Response Action Plan may be photocopies or condensed versions of the forms included in the associated sections of the response plan. Each Emergency Response Action Plan section may be tabbed for quick reference. The Action Plan shall be maintained in the front of the same binder that contains the complete response plan or it shall be contained in a separate binder. In the latter case, both binders shall be kept together so that the entire plan can be accessed by the qualified individual and appropriate spill response personnel. The Emergency Response Action Plan shall be made up of the following sections:

1. Qualified Individual Information (Section 1.2) partial

2. Emergency Notification Phone List (Section 1.3.1) partial

3. Spill Response Notification Form (Section 1.3.1) partial

4. Response Equipment List and Location (Section 1.3.2) complete

5. Response Equipment Testing and Deployment (Section 1.3.3) complete

6. Facility Response Team (Section 1.3.4) partial

7. Evacuation Plan (Section 1.3.5) condensed

8. Immediate Actions (Section 1.7.1) complete

9. Facility Diagram (Section 1.9) complete

1.2 Facility Information

The facility information form is designed to provide an overview of the site and a description of past activities at the facility. Much of the information required by this section may be obtained from the facility's existing SPCC Plan.

1.2.1 *Facility name and location:* Enter facility name and street address. Enter the address of corporate headquarters only if corporate headquarters are physically located at the facility. Include city, county, state, zip code, and phone number.

1.2.2 *Latitude and Longitude:* Enter the latitude and longitude of the facility. Include degrees, minutes, and seconds of the main entrance of the facility.

1.2.3 *Wellhead Protection Area:* Indicate if the facility is located in or drains into a wellhead protection area as defined by the Safe Drinking Water Act of 1986 (SDWA).[1] The response plan requirements in the Wellhead Protection Program are outlined by the State or Territory in which the facility resides.

[1] A wellhead protection area is defined as the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. For further information regarding State and territory protection programs, facility owners or operators may contact the SDWA Hotline at 1–800–426–4791.

1.2.4 *Owner/operator:* Write the name of the company or person operating the facility and the name of the person or company that owns the facility, if the two are different. List the address of the owner, if the two are different.

1.2.5 *Qualified Individual:* Write the name of the qualified individual for the entire facility. If more than one person is listed, each individual indicated in this section shall have full authority to implement the facility response plan. For each individual, list: name, position, home and work addresses (street addresses, not P.O. boxes), emergency phone number, and specific response training experience.

1.2.6 *Date of Oil Storage Start-up:* Enter the year which the present facility first started storing oil.

1.2.7 *Current Operation:* Briefly describe the facility's operations and include the North American Industrial Classification System (NAICS) code.

1.2.8 *Dates and Type of Substantial Expansion:* Include information on expansions that have occurred at the facility. Examples of such expansions include, but are not limited to: Throughput expansion, addition of a product line, change of a product line, and installation of additional oil storage capacity. The data provided shall include all facility historical information and detail the expansion of the facility. An example of substantial expansion is any material alteration of the facility which causes the owner or operator of the facility to re-evaluate and increase the response equipment necessary to adequately respond to a worst case discharge from the facility.

Date of Last Update: ___

Facility Information Form

Facility Name:_____
Location (Street Address):_____

City: ___ State: ___ Zip: ___

County: ___ Phone Number: ( ) ___

Latitude: ___ Degrees ___ Minutes ___ Seconds

Longitude: ___ Degrees ___ Minutes ___ Seconds

Wellhead Protection Area:_____
Owner:_____
Owner Location (Street Address):_____

(if different from Facility Address)

City: ___ State:___ Zip: ___

County: ___ Phone Number: ( ) ___

Operator (if not Owner):_____

Qualified Individual(s): (attach additional sheets if more than one)

Name:_____
Position:_____
Work Address:_____
Home Address:_____
Emergency Phone Number: ( )_____
Date of Oil Storage Start-up:_____
Current Operations:_____
_____
_____
Date(s) and Type(s) of Substantial Expansion(s):_____
_____

(Attach additional sheets if necessary)

1.3 Emergency Response Information

(A) The information provided in this section shall describe what will be needed in an actual emergency involving the discharge of oil or a combination of hazardous substances and oil discharge. The Emergency Response Information section of the plan must include the following components:

(1) The information provided in the Emergency Notification Phone List in section 1.3.1 identifies and prioritizes the names and phone numbers of the organizations and personnel that need to be notified immediately in the event of an emergency. This section shall include all the appropriate phone numbers for the facility. These numbers must be verified each time the plan is updated. The contact list must be accessible to all facility employees to ensure that, in case of a discharge, any employee on site could immediately notify the appropriate parties.

(2) The Spill Response Notification Form in section 1.3.1 creates a checklist of information that shall be provided to the National Response Center (NRC) and other response personnel. All information on this checklist must be known at the time of notification, or be in the process of being collected. This notification form is based on a similar form used by the NRC. Note: Do not delay spill notification to collect the information on the list.

(3) Section 1.3.2 provides a description of the facility's list of emergency response equipment and location of the response equipment. When appropriate, the amount of oil that emergency response equipment can handle and any limitations (e.g., launching sites) must be described.

(4) Section 1.3.3 provides information regarding response equipment tests and deployment drills. Response equipment deployment exercises shall be conducted to ensure that response equipment is operational and the personnel who would operate the equipment in a spill response are capable of

deploying and operating it. Only a representative sample of each type of response equipment needs to be deployed and operated, as long as the remainder is properly maintained. If appropriate, testing of response equipment may be conducted while it is being deployed. Facilities without facility-owned response equipment must ensure that the oil spill removal organization that is identified in the response plan to provide this response equipment certifies that the deployment exercises have been met. Refer to the National Preparedness for Response Exercise Program (PREP) Guidelines (see Appendix E to this part, section 13, for availability), which satisfy Oil Pollution Act (OPA) response exercise requirements.

(5) Section 1.3.4 lists the facility response personnel, including those employed by the facility and those under contract to the facility for response activities, the amount of time needed for personnel to respond, their responsibility in the case of an emergency, and their level of response training. Three different forms are included in this section. The Emergency Response Personnel List shall be composed of all personnel employed by the facility whose duties involve responding to emergencies, including oil discharges, even when they are not physically present at the site. An example of this type of person would be the Building Engineer-in-Charge or Plant Fire Chief. The second form is a list of the Emergency Response Contractors (both primary and secondary) retained by the facility. Any changes in contractor status must be reflected in updates to the response plan. Evidence of contracts with response contractors shall be included in this section so that the availability of resources can be verified. The last form is the Facility Response Team List, which shall be composed of both emergency response personnel (referenced by job title/position) and emergency response contractors, included in one of the two lists described above, that will respond immediately upon discovery of an oil discharge or other emergency (i.e., the first people to respond). These are to be persons normally on the facility premises or primary response contractors. Examples of these personnel would be the Facility Hazardous Materials (HAZMAT) Spill Team 1, Facility Fire Engine Company 1, Production Supervisor, or Transfer Supervisor. Company personnel must be able to respond immediately and adequately if contractor support is not available.

(6) Section 1.3.5 lists factors that must, as appropriate, be considered when preparing an evacuation plan.

(7) Section 1.3.6 references the responsibilities of the qualified individual for the facility in the event of an emergency.

(B) The information provided in the emergency response section will aid in the assessment of the facility's ability to respond to a worst case discharge and will identify additional assistance that may be needed. In addition, the facility owner or operator may want to produce a wallet-size card containing a checklist of the immediate response and notification steps to be taken in the event of an oil discharge.

1.3.1 Notification

Date of Last Update:_____

Emergency Notification Phone List Whom To Notify

Reporter's Name:_____
Date:_____
Facility Name:_____
Owner Name:_____
Facility Identification Number:_____
Date and Time of Each NRC Notification:_____

Organization	Phone No.
1. National Response Center (NRC):	1–800–424–8802
2. Qualified Individual:	
Evening Phone:	
3. Company Response Team:	
Evening Phone:	
4. Federal On-Scene Coordinator (OSC) and/or Regional	

Response Center (RRC):	
Evening Phone(s):	
Pager Number(s):	
5. Local Response Team (Fire Dept./Cooperatives):	
6. Fire Marshall:	
Evening Phone:	
7. State Emergency Response Commission (SERC):	
Evening Phone:	
8. State Police:	
9. Local Emergency Planning Committee (LEPC):	
10. Local Water Supply System:	
Evening Phone:	
11. Weather Report:	
12. Local Television/Radio Station for Evacuation Notification:	
13. Hospitals:	

Spill Response Notification Form

Reporter's Last Name:_____
First:_____
M.I.:_____
Position:_____

Phone Numbers:

Day ( ) –

Evening ( ) –

Company:_____
Organization Type:_____
Address:_____
_____
City:_____
State:_____
Zip:_____

Were Materials Discharged? ___ (Y/N) Confidential? ___ (Y/N)

Meeting Federal Obligations to Report? ___ (Y/N) Date Called: ___

Calling for Responsible Party? ___ (Y/N) Time Called: ___

Incident Description

Source and/or Cause of Incident:_____
_____
_____
_____
_____
Date of Incident:_____

Time of Incident: ___ AM/PM

Incident Address/Location:_____
_____

Nearest City:_____ State: ___ County: ____ Zip: ____

Distance from City: ___ Units of Measure: ___ Direction from City: ___

Section: ____ Township: ____ Range: ____ Borough: ____

Container Type: ___ Tank Oil Storage Capacity: ____ Units of Measure: ___

Facility Oil Storage Capacity: ____ Units of Measure: ___

Facility Latitude: ___ Degrees ___ Minutes ___ Seconds

Facility Longitude: ___ Degrees ___ Minutes ___ Seconds

Material

CHRIS Code	Discharged quantity	Unit of measure	Material Discharged in water	Quantity	Unit of measure

Response Action

Actions Taken to Correct, Control or Mitigate Incident:

_____
_____
_____
_____

Impact

Number of Injuries: ___ Number of Deaths: ___

Were there Evacuations? ___ (Y/N) Number Evacuated: ___

Was there any Damage? ___ (Y/N)

Damage in Dollars (approximate):_____
Medium Affected:_____
Description:_____
More Information about Medium:_____
_____
_____

Additional Information

Any information about the incident not recorded elsewhere in the report:

_____
_____
_____

Caller Notifications

EPA? ___ (Y/N) USCG? ___ (Y/N) State? ___ (Y/N)

Other? ___ (Y/N) Describe: _____

1.3.2 Response Equipment List

Date of Last Update:___

Facility Response Equipment List

1. Skimmers/Pumps—Operational Status:_____
Type, Model, and Year:_____
_____

Type Model Year

Number:_____

Capacity: ____ gal./min.

Daily Effective Recovery Rate:_____
Storage Location(s):_____
Date Fuel Last Changed:_____
2. Boom—Operational Status:_____
Type, Model, and Year:_____

Type Model Year

Number:_____

Size (length): ____ ft.

Containment Area: ____ sq. ft.

Storage Location:_____

3. Chemicals Stored (Dispersants listed on EPA's NCP Product Schedule)

Type	Amount	Date purchased	Treatment capacity	Storage location

Were appropriate procedures used to receive approval for use of dispersants in accordance with the NCP (40 CFR 300.910) and the Area Contingency Plan (ACP), where applicable?___ (Y/N).

Name and State of On-Scene Coordinator (OSC) authorizing use: ___ .

Date Authorized: ___ .

4. Dispersant Dispensing Equipment—Operational Status: ___ .

Type and year	Capacity	Storage location	Response time (minutes)

5. Sorbents—Operational Status:_____
Type and Year Purchased:_____
Amount:_____
Absorption Capacity (gal.):_____
Storage Location(s):_____
6. Hand Tools—Operational Status:_____

Type and year	Quantity	Storage location

7. Communication Equipment (include operating frequency and channel and/or cellular phone numbers)—Operational Status: ___

Type and year	Quantity	Storage location/number

8. Fire Fighting and Personnel Protective Equipment—Operational Status: ___

Type and year	Quantity	Storage location

9. Other (e.g., Heavy Equipment, Boats and Motors)—Operational Status: ___

Type and year	Quantity	Storage location

1.3.3 Response Equipment Testing/Deployment

Date of Last Update:____

Response Equipment Testing and Deployment Drill Log

Last Inspection or Response Equipment Test Date:_____
Inspection Frequency:_____
Last Deployment Drill Date:_____
Deployment Frequency:_____
Oil Spill Removal Organization Certification (if applicable):_____

1.3.4 Personnel

Date of Last Update:____

Emergency Response Personnel

Company Personnel

Name	Phone[1]	Response time	Responsibility during response action	Response training type/date
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

[1]Phone number to be used when person is not on-site.

Emergency Response Contractors

Date of Last Update: ____

Contractor	Phone	Response time	Contract responsibility[1]
1.			

2.			
3.			
4.			

[1]Include evidence of contracts/agreements with response contractors to ensure the availability of personnel and response equipment.

Facility Response Team

Date of Last Update:____

Team member	Response time (minutes)	Phone or pager number (day/evening)
Qualified Individual:		
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/

Note: If the facility uses contracted help in an emergency response situation, the owner or operator must provide the contractors' names and review the contractors' capacities to provide adequate personnel and response equipment.

1.3.5 Evacuation Plans

1.3.5.1 Based on the analysis of the facility, as discussed elsewhere in the plan, a facility-wide evacuation plan shall be developed. In addition, plans to evacuate parts of the facility that are at a high risk of exposure in the event of a discharge or other release must be developed. Evacuation routes must be shown on a diagram of the facility (see section 1.9 of this appendix). When developing evacuation plans, consideration must be given to the following factors, as appropriate:

(1) Location of stored materials;

(2) Hazard imposed by discharged material;

(3) Discharge flow direction;

(4) Prevailing wind direction and speed;

(5) Water currents, tides, or wave conditions (if applicable);

(6) Arrival route of emergency response personnel and response equipment;

(7) Evacuation routes;

(8) Alternative routes of evacuation;

(9) Transportation of injured personnel to nearest emergency medical facility;

(10) Location of alarm/notification systems;

(11) The need for a centralized check-in area for evacuation validation (roll call);

(12) Selection of a mitigation command center; and

(13) Location of shelter at the facility as an alternative to evacuation.

1.3.5.2 One resource that may be helpful to owners or operators in preparing this section of the response plan is The *Handbook of Chemical Hazard Analysis Procedures* by the Federal Emergency Management Agency (FEMA), Department of Transportation (DOT), and EPA. *The Handbook of Chemical Hazard Analysis Procedures* is available from: FEMA , Publication Office, 500 C. Street, S.W., Washington, DC 20472, (202) 646–3484.

1.3.5.3 As specified in §112.20(h)(1)(vi), the facility owner or operator must reference existing community evacuation plans, as appropriate.

1.3.6 Qualified Individual's Duties

The duties of the designated qualified individual are specified in §112.20(h)(3)(ix). The qualified individual's duties must be described and be consistent with the minimum requirements in §112.20(h)(3)(ix). In addition, the qualified individual must be identified with the Facility Information in section 1.2 of the response plan.

1.4 Hazard Evaluation

This section requires the facility owner or operator to examine the facility's operations closely and to predict where discharges could occur. Hazard evaluation is a widely used industry practice that allows

facility owners or operators to develop a complete understanding of potential hazards and the response actions necessary to address these hazards. *The Handbook of Chemical Hazard Analysis Procedures,* prepared by the EPA, DOT, and the FEMA and the *Hazardous Materials Emergency Planning Guide* (NRT–1), prepared by the National Response Team are good references for conducting a hazard analysis. Hazard identification and evaluation will assist facility owners or operators in planning for potential discharges, thereby reducing the severity of discharge impacts that may occur in the future. The evaluation also may help the operator identify and correct potential sources of discharges. In addition, special hazards to workers and emergency response personnel's health and safety shall be evaluated, as well as the facility's oil spill history.

1.4.1 Hazard Identification

The Tank and Surface Impoundment (SI) forms, or their equivalent, that are part of this section must be completed according to the directions below. ("Surface Impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well or a seepage facility.) Similar worksheets, or their equivalent, must be developed for any other type of storage containers.

(1) List each tank at the facility with a separate and distinct identifier. Begin aboveground tank identifiers with an "A" and belowground tank identifiers with a "B", or submit multiple sheets with the aboveground tanks and belowground tanks on separate sheets.

(2) Use gallons for the maximum capacity of a tank; and use square feet for the area.

(3) Using the appropriate identifiers and the following instructions, fill in the appropriate forms:

(a) Tank or SI number—Using the aforementioned identifiers (A or B) or multiple reporting sheets, identify each tank or SI at the facility that stores oil or hazardous materials.

(b) Substance Stored—For each tank or SI identified, record the material that is stored therein. If the tank or SI is used to store more than one material, list all of the stored materials.

(c) Quantity Stored—For each material stored in each tank or SI, report the average volume of material stored on any given day.

(d) Tank Type or Surface Area/Year—For each tank, report the type of tank (e.g., floating top), and the year the tank was originally installed. If the tank has been refabricated, the year that the latest refabrication was completed must be recorded in parentheses next to the year installed. For each SI, record the surface area of the impoundment and the year it went into service.

(e) Maximum Capacity—Record the operational maximum capacity for each tank and SI. If the maximum capacity varies with the season, record the upper and lower limits.

(f) Failure/Cause—Record the cause and date of any tank or SI failure which has resulted in a loss of tank or SI contents.

(4) Using the numbers from the tank and SI forms, label a schematic drawing of the facility. This drawing shall be identical to any schematic drawings included in the SPCC Plan.

(5) Using knowledge of the facility and its operations, describe the following in writing:

(a) The loading and unloading of transportation vehicles that risk the discharge of oil or release of hazardous substances during transport processes. These operations may include loading and unloading of trucks, railroad cars, or vessels. Estimate the volume of material involved in transfer operations, if the exact volume cannot be determined.

(b) Day-to-day operations that may present a risk of discharging oil or releasing a hazardous substance. These activities include scheduled venting, piping repair or replacement, valve maintenance, transfer of tank contents from one tank to another, etc. (not including transportation-related activities). Estimate the

volume of material involved in these operations, if the exact volume cannot be determined.

(c) The secondary containment volume associated with each tank and/or transfer point at the facility. The numbering scheme developed on the tables, or an equivalent system, must be used to identify each containment area. Capacities must be listed for each individual unit (tanks, slumps, drainage traps, and ponds), as well as the facility total.

(d) Normal daily throughput for the facility and any effect on potential discharge volumes that a negative or positive change in that throughput may cause.

Hazard Identification Tanks[1]

Date of Last Update: ____

Tank No.	Substance Stored (Oil and Hazardous Substance)	Quantity Stored (gallons)	Tank Type/Year	Maximum Capacity (gallons)	Failure/Cause

[1]Tank = any container that stores oil.

Attach as many sheets as necessary.

Hazard Identification Surface Impoundments (SIs)

Date of Last Update: ____

SI No.	Substance Stored	Quantity Stored (gallons)	Surface Area/Year	Maximum Capacity (gallons)	Failure/Cause

Attach as many sheets as necessary.

1.4.2 Vulnerability Analysis

The vulnerability analysis shall address the potential effects (i.e., to human health, property, or the environment) of an oil discharge. Attachment C–III to Appendix C to this part provides a method that owners or operators shall use to determine appropriate distances from the facility to fish and wildlife and sensitive environments. Owners or operators can use a comparable formula that is considered acceptable by the RA. If a comparable formula is used, documentation of the reliability and analytical soundness of the formula must be attached to the response plan cover sheet. This analysis must be prepared for each facility and, as appropriate, must discuss the vulnerability of:

(1) Water intakes (drinking, cooling, or other);

(2) Schools;

(3) Medical facilities;

(4) Residential areas;

(5) Businesses;

(6) Wetlands or other sensitive environments;[2]

[2] Refer to the DOC/NOAA “Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments” (See appendix E to this part, section 13, for availability).

(7) Fish and wildlife;

(8) Lakes and streams;

(9) Endangered flora and fauna;

(10) Recreational areas;

(11) Transportation routes (air, land, and water);

(12) Utilities; and

(13) Other areas of economic importance (e.g., beaches, marinas) including terrestrially sensitive environments, aquatic environments, and unique habitats.

1.4.3 Analysis of the Potential for an Oil Discharge

Each owner or operator shall analyze the probability of a discharge occurring at the facility. This analysis shall incorporate factors such as oil discharge history, horizontal range of a potential discharge, and vulnerability to natural disaster, and shall, as appropriate, incorporate other factors such as tank age. This analysis will provide information for developing discharge scenarios for a worst case discharge and small and medium discharges and aid in the development of techniques to reduce the size and

frequency of discharges. The owner or operator may need to research the age of the tanks the oil discharge history at the facility.

1.4.4 Facility Reportable Oil Spill History

Briefly describe the facility's reportable oil spill[3] history for the entire life of the facility to the extent that such information is reasonably identifiable, including:

[3] As described in 40 CFR part 110, reportable oil spills are those that: (a) violate applicable water quality standards, or (b) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

(1) Date of discharge(s);

(2) List of discharge causes;

(3) Material(s) discharged;

(4) Amount discharged in gallons;

(5) Amount of discharge that reached navigable waters, if applicable;

(6) Effectiveness and capacity of secondary containment;

(7) Clean-up actions taken;

(8) Steps taken to reduce possibility of recurrence;

(9) Total oil storage capacity of the tank(s) or impoundment(s) from which the material discharged;

(10) Enforcement actions;

(11) Effectiveness of monitoring equipment; and

(12) Description(s) of how each oil discharge was detected.

The information solicited in this section may be similar to requirements in 40 CFR 112.4(a). Any duplicate information required by §112.4(a) may be photocopied and inserted.

1.5 Discharge Scenarios

In this section, the owner or operator is required to provide a description of the facility's worst case discharge, as well as a small and medium discharge, as appropriate. A multi-level planning approach has been chosen because the response actions to a discharge (*i.e.* , necessary response equipment, products, and personnel) are dependent on the magnitude of the discharge. Planning for lesser discharges is necessary because the nature of the response may be qualitatively different depending on the quantity of the discharge. The facility owner or operator shall discuss the potential direction of the discharge pathway.

1.5.1 Small and Medium Discharges

1.5.1.1 To address multi-level planning requirements, the owner or operator must consider types of facility-specific discharge scenarios that may contribute to a small or medium discharge. The scenarios shall account for all the operations that take place at the facility, including but not limited to:

(1) Loading and unloading of surface transportation;

(2) Facility maintenance;

(3) Facility piping;

(4) Pumping stations and sumps;

(5) Oil storage tanks;

(6) Vehicle refueling; and

(7) Age and condition of facility and components.

1.5.1.2 The scenarios shall also consider factors that affect the response efforts required by the facility. These include but are not limited to:

(1) Size of the discharge;

(2) Proximity to downgradient wells, waterways, and drinking water intakes;

(3) Proximity to fish and wildlife and sensitive environments;

(4) Likelihood that the discharge will travel offsite (*i.e.,* topography, drainage);

(5) Location of the material discharged (*i.e.,* on a concrete pad or directly on the soil);

(6) Material discharged;

(7) Weather or aquatic conditions (*i.e.,* river flow);

(8) Available remediation equipment;

(9) Probability of a chain reaction of failures; and

(10) Direction of discharge pathway.

1.5.2 Worst Case Discharge

1.5.2.1 In this section, the owner or operator must identify the worst case discharge volume at the facility. Worksheets for production and non-production facility owners or operators to use when calculating worst case discharge are presented in Appendix D to this part. When planning for the worst case discharge response, all of the aforementioned factors listed in the small and medium discharge section of the response plan shall be addressed.

1.5.2.2 For onshore storage facilities and production facilities, permanently manifolded oil storage tanks are defined as tanks that are designed, installed, and/or operated in such a manner that the multiple tanks function as one storage unit (i.e., multiple tank volumes are equalized). In this section of the response plan, owners or operators must provide evidence that oil storage tanks with common piping or piping systems are not operated as one unit. If such evidence is provided and is acceptable to the RA, the worst case discharge volume shall be based on the combined oil storage capacity of all manifold tanks or the oil storage capacity of the largest single oil storage tank within the secondary containment area, whichever is greater. For permanently manifolded oil storage tanks that function as one storage unit, the worst case discharge shall be based on the combined oil storage capacity of all manifolded tanks or the oil storage capacity of the largest single tank within a secondary containment area, whichever is greater. For purposes of the worst case discharge calculation, permanently manifolded oil storage tanks that are separated by internal divisions for each tank are considered to be single tanks and individual manifolded tank volumes are not combined.

1.6 Discharge Detection Systems

In this section, the facility owner or operator shall provide a detailed description of the procedures and equipment used to detect discharges. A section on discharge detection by personnel and a discussion of automated discharge detection, if applicable, shall be included for both regular operations and after hours operations. In addition, the facility owner or operator shall discuss how the reliability of any automated system will be checked and how frequently the system will be inspected.

1.6.1 Discharge Detection by Personnel

In this section, facility owners or operators shall describe the procedures and personnel that will detect any discharge of oil or release of a hazardous substance. A thorough discussion of facility inspections must be included. In addition, a description of initial response actions shall be addressed. This section shall reference section 1.3.1 of the response plan for emergency response information.

1.6.2 Automated Discharge Detection

In this section, facility owners or operators must describe any automated discharge detection equipment that the facility has in place. This section shall include a discussion of overfill alarms, secondary containment sensors, etc. A discussion of the plans to verify an automated alarm and the actions to be taken once verified must also be included.

1.7 Plan Implementation

In this section, facility owners or operators must explain in detail how to implement the facility's emergency response plan by describing response actions to be carried out under the plan to ensure the safety of the facility and to mitigate or prevent discharges described in section 1.5 of the response plan. This section shall include the identification of response resources for small, medium, and worst case discharges; disposal plans; and containment and drainage planning. A list of those personnel who would be involved in the cleanup shall be identified. Procedures that the facility will use, where appropriate or necessary, to update their plan after an oil discharge event and the time frame to update the plan must be described.

1.7.1 Response Resources for Small, Medium, and Worst Case Discharages

1.7.1.1 Once the discharge scenarios have been identified in section 1.5 of the response plan, the facility owner or operator shall identify and describe implementation of the response actions. The facility owner or operator shall demonstrate accessibility to the proper response personnel and equipment to effectively respond to all of the identified discharge scenarios. The determination and demonstration of adequate response capability are presented in Appendix E to this part. In addition, steps to expedite the cleanup of oil discharges must be discussed. At a minimum, the following items must be addressed:

(1) Emergency plans for spill response;

(2) Additional response training;

(3) Additional contracted help;

(4) Access to additional response equipment/experts; and

(5) Ability to implement the plan including response training and practice drills.

1.7.1.2A recommended form detailing immediate actions follows.

Oil Spill Response—Immediate Actions

1. Stop the product flow	Act quickly to secure pumps, close valves, etc.
2. Warn personnel	Enforce safety and security measures.
3. Shut off ignition sources	Motors, electrical circuits, open flames, etc.

4. Initiate containment	Around the tank and/or in the water with oil boom.
5. Notify NRC	1–800–424–8802
6. Notify OSC	
7. Notify, as appropriate	

Source: FOSS, Oil Spill Response—Emergency Procedures, Revised December 3, 1992.

1.7.2 Disposal Plans

1.7.2.1 Facility owners or operators must describe how and where the facility intends to recover, reuse, decontaminate, or dispose of materials after a discharge has taken place. The appropriate permits required to transport or dispose of recovered materials according to local, State, and Federal requirements must be addressed. Materials that must be accounted for in the disposal plan, as appropriate, include:

(1) Recovered product;

(2) Contaminated soil;

(3) Contaminated equipment and materials, including drums, tank parts, valves, and shovels;

(4) Personnel protective equipment;

(5) Decontamination solutions;

(6) Adsorbents; and

(7) Spent chemicals.

1.7.2.2 These plans must be prepared in accordance with Federal (e.g., the Resource Conservation and Recovery Act [RCRA]), State, and local regulations, where applicable. A copy of the disposal plans from the facility's SPCC Plan may be inserted with this section, including any diagrams in those plans.

Material	Disposal facility	Location	RCRA permit/manifest
1.			
2.			
3.			
4.			

1.7.3 Containment and Drainage Planning

A proper plan to contain and control a discharge through drainage may limit the threat of harm to human health and the environment. This section shall describe how to contain and control a discharge through drainage, including:

(1) The available volume of containment (use the information presented in section 1.4.1 of the response plan);

(2) The route of drainage from oil storage and transfer areas;

(3) The construction materials used in drainage troughs;

(4) The type and number of valves and separators used in the drainage system;

(5) Sump pump capacities;

(6) The containment capacity of weirs and booms that might be used and their location (see section 1.3.2 of this appendix); and

(7) Other cleanup materials.

In addition, a facility owner or operator must meet the inspection and monitoring requirements for drainage contained in 40 CFR part 112, subparts A through C. A copy of the containment and drainage plans that are required in 40 CFR part 112, subparts A through C may be inserted in this section, including any diagrams in those plans.

Note: The general permit for stormwater drainage may contain additional requirements.

1.8 Self-Inspection, Drills/Exercises, and Response Training

The owner or operator must develop programs for facility response training and for drills/exercises according to the requirements of 40 CFR 112.21. Logs must be kept for facility drills/exercises, personnel response training, and spill prevention meetings. Much of the recordkeeping information required by this section is also contained in the SPCC Plan required by 40 CFR 112.3. These logs may be included in the facility response plan or kept as an annex to the facility response plan.

1.8.1 Facility Self-Inspection

Under 40 CFR 112.7(e), you must include the written procedures and records of inspections for each facility in the SPCC Plan. You must include the inspection records for each container, secondary containment, and item of response equipment at the facility. You must cross-reference the records of inspections of each container and secondary containment required by 40 CFR 112.7(e) in the facility response plan. The inspection record of response equipment is a new requirement in this plan. Facility self-inspection requires two-steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspection and its findings. You must note the date of each inspection. You must keep facility response plan records for five years. You must keep SPCC records for three years.

1.8.1.1. Tank Inspection

The tank inspection checklist presented below has been included as guidance during inspections and monitoring. Similar requirements exist in 40 CFR part 112, subparts A through C. Duplicate information from the SPCC Plan may be photocopied and inserted in this section. The inspection checklist consists of the following items:

Tank Inspection Checklist

1. Check tanks for leaks, specifically looking for:

A. drip marks;

B. discoloration of tanks;

C. puddles containing spilled or leaked material;

D. corrosion;

E. cracks; and

F. localized dead vegetation.

2. Check foundation for:

A. cracks;

B. discoloration;

C. puddles containing spilled or leaked material;

D. settling;

E. gaps between tank and foundation; and

F. damage caused by vegetation roots.

3. Check piping for:

A. droplets of stored material;

B. discoloration;

C. corrosion;

D. bowing of pipe between supports;

E. evidence of stored material seepage from valves or seals; and

F. localized dead vegetation.

Tank/Surface Impoundment Inspection Log

Inspector	Tank or SI#	Date	Comments

1.8.1.2 Response Equipment Inspection

Using the Emergency Response Equipment List provided in section 1.3.2 of the response plan, describe each type of response equipment, checking for the following:

Response Equipment Checklist

1. Inventory (item and quantity);

2. Storage location;

3. Accessibility (time to access and respond);

4. Operational status/condition;

5. Actual use/testing (last test date and frequency of testing); and

6. Shelf life (present age, expected replacement date).

Please note any discrepancies between this list and the available response equipment.

Response Equipment Inspection Log

[Use section 1.3.2 of the response plan as a checklist]

Inspector	Date	Comments

1.8.1.3 Secondary Containment Inspection

Inspect the secondary containment (as described in sections 1.4.1 and 1.7.2 of the response plan), checking the following:

Secondary Containment Checklist

1. Dike or berm system.

A. Level of precipitation in dike/available capacity;

B. Operational status of drainage valves;

C. Dike or berm permeability;

D. Debris;

E. Erosion;

F. Permeability of the earthen floor of diked area; and

G. Location/status of pipes, inlets, drainage beneath tanks, etc.

2. Secondary containment

A. Cracks;

B. Discoloration;

C. Presence of spilled or leaked material (standing liquid);

D. Corrosion; and

E. Valve conditions.

3. Retention and drainage ponds

A. Erosion;

B. Available capacity;

C. Presence of spilled or leaked material;

D. Debris; and

E. Stressed vegetation.

The tank inspection checklist presented below has been included as guidance during inspections and monitoring. Similar requirements exist in 40 CFR part 112, subparts A through C. Similar requirements exist in 40 CFR 112.7(e). Duplicate information from the SPCC Plan may be photocopied and inserted in this section.

1.8.2 Facility Drills/Exercises

(A) CWA section 311(j)(5), as amended by OPA, requires the response plan to contain a description of facility drills/exercises. According to 40 CFR 112.21(c), the facility owner or operator shall develop a program of facility response drills/exercises, including evaluation procedures. Following the PREP guidelines (see Appendix E to this part, section 13, for availability) would satisfy a facility's requirements for drills/exercises under this part. Alternately, under §112.21(c), a facility owner or operator may develop a program that is not based on the PREP guidelines. Such a program is subject to approval by the Regional Administrator based on the description of the program provided in the response plan.

(B) The PREP Guidelines specify that the facility conduct internal and external drills/exercises. The internal exercises include: qualified individual notification drills, spill management team tabletop exercises, equipment deployment exercises, and unannounced exercises. External exercises include Area Exercises. Credit for an Area or Facility-specific Exercise will be given to the facility for an actual response to a discharge in the area if the plan was utilized for response to the discharge and the objectives of the Exercise were met and were properly evaluated, documented, and self-certified.

(C) Section 112.20(h)(8)(ii) requires the facility owner or operator to provide a description of the drill/exercise program to be carried out under the response plan. Qualified Individual Notification Drill and Spill Management Team Tabletop Drill logs shall be provided in sections 1.8.2.1 and 1.8.2.2, respectively. These logs may be included in the facility response plan or kept as an annex to the facility response plan. See section 1.3.3 of this appendix for Equipment Deployment Drill Logs.

1.8.2.1 Qualified Individual Notification Drill Logs

Qualified Individual Notification Drill Log

Date:_____
Company:_____
Qualified Individual(s):_____
Emergency Scenario:_____
_____
_____
Evaluation:_____
_____
_____
_____
Changes to be Implemented:_____
_____
_____
Time Table for Implementation:_____
_____

1.8.2.2 Spill Management Team Tabletop Exercise Logs

Spill Management Team Tabletop Exercise Log

Date:_____
Company:_____
Qualified Individual(s):_____
Emergency Scenario:_____
_____
_____
Evaluation:_____
_____
_____
_____

Changes to be Implemented:_____
_____
_____
Time Table for Implementation:_____

1.8.3 Response Training

Section 112.21(a) requires facility owners or operators to develop programs for facility response training. Facility owners or operators are required by §112.20(h)(8)(iii) to provide a description of the response training program to be carried out under the response plan. A facility's training program can be based on the USCG's Training Elements for Oil Spill Response, to the extent applicable to facility operations, or another response training program acceptable to the RA. The training elements are available from the USCG Office of Response (G-MOR) at (202) 267–0518 or fax (202) 267–4085. Personnel response training logs and discharge prevention meeting logs shall be included in sections 1.8.3.1 and 1.8.3.2 of the response plan respectively. These logs may be included in the facility response plan or kept as an annex to the facility response plan.

1.8.3.1 Personnel Response Training Logs

Personnel Response Training Log

Name	Response training/date and number of hours	Prevention training/date and number of hours

1.8.3.2 Discharge Prevention Meetings Logs

Discharge Prevention Meeting Log

Date:_____
Attendees:_____
_____
_____
_____
_____
_____
_____
_____
_____

Subject/issue identified	Required action	Implementation date

1.9 Diagrams

The facility-specific response plan shall include the following diagrams. Additional diagrams that would aid in the development of response plan sections may also be included.

(1) The Site Plan Diagram shall, as appropriate, include and identify:

(A) the entire facility to scale;

(B) above and below ground bulk oil storage tanks;

(C) the contents and capacities of bulk oil storage tanks;

(D) the contents and capacity of drum oil storage areas;

(E) the contents and capacities of surface impoundments;

(F) process buildings;

(G) transfer areas;

(H) secondary containment systems (location and capacity);

(I) structures where hazardous materials are stored or handled, including materials stored and capacity of storage;

(J) location of communication and emergency response equipment;

(K) location of electrical equipment which contains oil; and

(L) for complexes only, the interface(s) (i.e., valve or component) between the portion of the facility regulated by EPA and the portion(s) regulated by other Agencies. In most cases, this interface is defined as the last valve inside secondary containment before piping leaves the secondary containment area to connect to the transportation-related portion of the facility (i.e., the structure used or intended to be used to transfer oil to or from a vessel or pipeline). In the absence of secondary containment, this interface is the valve manifold adjacent to the tank nearest the transfer structure as described above. The interface may be defined differently at a specific facility if agreed to by the RA and the appropriate Federal official.

(2) The Site Drainage Plan Diagram shall, as appropriate, include:

(A) major sanitary and storm sewers, manholes, and drains;

(B) weirs and shut-off valves;

(C) surface water receiving streams;

(D) fire fighting water sources;

(E) other utilities;

(F) response personnel ingress and egress;

(G) response equipment transportation routes; and

(H) direction of discharge flow from discharge points.

(3) The Site Evacuation Plan Diagram shall, as appropriate, include:

(A) site plan diagram with evacuation route(s); and

(B) location of evacuation regrouping areas.

1.10 Security

According to 40 CFR 112.7(g) facilities are required to maintain a certain level of security, as appropriate. In this section, a description of the facility security shall be provided and include, as appropriate:

(1) emergency cut-off locations (automatic or manual valves);

(2) enclosures (e.g., fencing, etc.);

(3) guards and their duties, day and night;

(4) lighting;

(5) valve and pump locks; and

(6) pipeline connection caps.

The SPCC Plan contains similar information. Duplicate information may be photocopied and inserted in this section.

2.0 Response Plan Cover Sheet

A three-page form has been developed to be completed and submitted to the RA by owners or operators who are required to prepare and submit a facility-specific response plan. The cover sheet (Attachment F–1) must accompany the response plan to provide the Agency with basic information concerning the facility. This section will describe the Response Plan Cover Sheet and provide instructions for its completion.

2.1 General Information

Owner/Operator of Facility: Enter the name of the owner of the facility (if the owner is the operator). Enter the operator of the facility if otherwise. If the owner/operator of the facility is a corporation, enter the name of the facility's principal corporate executive. Enter as much of the name as will fit in each section.

(1) *Facility Name:* Enter the proper name of the facility.

(2) *Facility Address:* Enter the street address, city, State, and zip code.

(3) *Facility Phone Number:* Enter the phone number of the facility.

(4) *Latitude and Longitude:* Enter the facility latitude and longitude in degrees, minutes, and seconds.

(5) *Dun and Bradstreet Number:* Enter the facility's Dun and Bradstreet number if available (this

information may be obtained from public library resources).

(6) North American Industrial Classification System (NAICS) Code: Enter the facility's NAICS code as determined by the Office of Management and Budget (this information may be obtained from public library resources.)

(7) *Largest Oil Storage Tank Capacity:* Enter the capacity in GALLONS of the largest aboveground oil storage tank at the facility.

(8) *Maximum Oil Storage Capacity:* Enter the total maximum capacity in GALLONS of all aboveground oil storage tanks at the facility.

(9) *Number of Oil Storage Tanks:* Enter the number of all aboveground oil storage tanks at the facility.

(10) *Worst Case Discharge Amount:* Using information from the worksheets in Appendix D, enter the amount of the worst case discharge in GALLONS.

(11) *Facility Distance to Navigable Waters:* Mark the appropriate line for the nearest distance between an opportunity for discharge (i.e., oil storage tank, piping, or flowline) and a navigable water.

2.2 Applicability of Substantial Harm Criteria

Using the flowchart provided in Attachment C–I to Appendix C to this part, mark the appropriate answer to each question. Explanations of referenced terms can be found in Appendix C to this part. If a comparable formula to the ones described in Attachment C–III to Appendix C to this part is used to calculate the planning distance, documentation of the reliability and analytical soundness of the formula must be attached to the response plan cover sheet.

2.3 Certification

Complete this block after all other questions have been answered.

3.0 Acronyms

ACP: Area Contingency Plan

ASTM: American Society of Testing Materials

bbls: Barrels

bpd: Barrels per Day

bph: Barrels per Hour

CHRIS: Chemical Hazards Response Information System

CWA: Clean Water Act

DOI: Department of Interior

DOC: Department of Commerce

DOT: Department of Transportation

EPA: Environmental Protection Agency

FEMA: Federal Emergency Management Agency

FR: Federal Register

gal: Gallons

gpm: Gallons per Minute

HAZMAT: Hazardous Materials

LEPC: Local Emergency Planning Committee

MMS: Minerals Management Service (part of DOI)

NAICS: North American Industrial Classification System

NCP: National Oil and Hazardous Substances Pollution Contingency Plan

NOAA: National Oceanic and Atmospheric Administration (part of DOC)

NRC: National Response Center

NRT: National Response Team

OPA: Oil Pollution Act of 1990

OSC: On-Scene Coordinator

PREP: National Preparedness for Response Exercise Program

RA: Regional Administrator

RCRA: Resource Conservation and Recovery Act

RRC: Regional Response Centers

RRT: Regional Response Team

RSPA: Research and Special Programs Administration

SARA: Superfund Amendments and Reauthorization Act

SERC: State Emergency Response Commission

SDWA: Safe Drinking Water Act of 1986

SI: Surface Impoundment

SPCC: Spill Prevention, Control, and Countermeasures

USCG: United States Coast Guard

4.0 References

CONCAWE. 1982. Methodologies for Hazard Analysis and Risk Assessment in the Petroleum Refining and Storage Industry. Prepared by CONCAWE's Risk Assessment Ad-hoc Group.

U.S. Department of Housing and Urban Development. 1987. Siting of HUD-Assisted Projects Near

Hazardous Facilities: Acceptable Separation Distances from Explosive and Flammable Hazards. Prepared by the Office of Environment and Energy, Environmental Planning Division, Department of Housing and Urban Development. Washington, DC.

U.S. DOT, FEMA and U.S. EPA. Handbook of Chemical Hazard Analysis Procedures.

U.S. DOT, FEMA and U.S. EPA. Technical Guidance for Hazards Analysis: Emergency Planning for Extremely Hazardous Substances.

The National Response Team. 1987. Hazardous Materials Emergency Planning Guide. Washington, DC.

The National Response Team. 1990. Oil Spill Contingency Planning, National Status: A Report to the President. Washington, DC. U.S. Government Printing Office.

Offshore Inspection and Enforcement Division. 1988. Minerals Management Service, Offshore Inspection Program: National Potential Incident of Noncompliance (PINC) List. Reston, VA.

Attachments to Appendix F

Attachment F–1—Response Plan Cover Sheet

This cover sheet will provide EPA with basic information concerning the facility. It must accompany a submitted facility response plan. Explanations and detailed instructions can be found in Appendix F. Please type or write legibly in blue or black ink. Public reporting burden for the collection of this information is estimated to vary from 1 hour to 270 hours per response in the first year, with an average of 5 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate of this information, including suggestions for reducing this burden to: Chief, Information Policy Branch, Mail Code: PM–2822, U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington D.C. 20503.

General Information

Owner/Operator of Facility:

_____
Facility Name:_____

Facility Address (street address or route):

_____
_____

City, State, and U.S. Zip Code:

_____
Facility Phone No.:_____

Latitude (Degrees: North):

_____

degrees, minutes, seconds

Dun & Bradstreet Number:[1]

[1] These numbers may be obtained from public library resources.

_____

Largest Aboveground Oil Storage Tank Capacity (Gallons):

_____

Number of Aboveground Oil Storage Tanks:

_____

Longitude (Degrees: West):

_____
degrees, minutes, seconds_____
North American Industrial Classification System (NAICS) Code:[1] _____
_____
Maximum Oil Storage Capacity (Gallons):_____
Worst Case Oil Discharge Amount (Gallons):_____
Facility Distance to Navigable Water. Mark the appropriate line._____

0–1/4mile __1/4–1/2mile __1/2–1 mile __ >1 mile __

Applicability of Substantial Harm Criteria

Does the facility transfer oil over-water[2] to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

[2] Explanations of the above-referenced terms can be found in Appendix C to this part. If a comparable formula to the ones contained in Attachment C–III is used to establish the appropriate distance to fish and wildlife and sensitive environments or public drinking water intakes, documentation of the reliability and analytical soundness of the formula must be attached to this form.

Yes_____
No_____

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

Yes_____
No_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance[2] (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?[3]

[3] 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 13, for availability) and the applicable ACP.

Yes_____
No_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance[2] (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?[2] _____
Yes_____
No_____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill[2] in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes_____
No_____

Certification

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

Signature:_____
Name (Please type or print):_____
_____
Title:_____
Date:_____

[59 FR 34122, July 1, 1994; 59 FR 49006, Sept. 26, 1994, as amended at 65 FR 40816, June 30, 2000; 65 FR 43840, July 14, 2000; 66 FR 34561, June 29, 2001; 67 FR 47152, July 17, 2002]

Appendix G to Part 112—Tier I Qualified Facility SPCC Plan

Tier I Qualified Facility SPCC Plan

This template constitutes the SPCC Plan for the facility, when completed and signed by the owner or operator of a facility that meets the applicability criteria in §112.3(g)(1). This template addresses the requirements of 40 CFR part 112. Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or for a facility attended fewer than four hours per day, at the nearest field office. When making operational changes at a facility that are necessary to comply with the rule requirements, the owner/operator should follow state and local requirements (such as for permitting, design and construction) and obtain professional assistance, as appropriate.

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number _____ ( ) -

Owner or operator Name _____

Owner or operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number _____ ( ) -

I. Self-Certification Statement (§112.6(a)(1))

The owner or operator of a facility certifies that each of the following is true in order to utilize this template to comply with the SPCC requirements:

I _____, certify that the following is accurate:

1. I am familiar with the applicable requirements of 40 CFR part 112;
2. I have visited and examined the facility;
3. This Plan was prepared in accordance with accepted and sound industry practices and standards;
4. Procedures for required inspections and testing have been established in accordance with industry inspection and testing standards or recommended practices;
5. I will fully implement the Plan;
6. This facility meets the following qualification criteria (under §112.3(g)(1)):
   a. The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less; and
   b. The facility has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons and 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 self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war, or terrorism); and

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c. There is no individual oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.

7. This Plan does not deviate from any requirement of 40 CFR part 112 as allowed by §112.7(a)(2) (environmental equivalence) and §112.7(d) (impracticability of secondary containment) or include an measures pursuant to §112.9(c)(6) for produced water containers and any associated piping;
8. This Plan and individual(s) responsible for implementing this Plan have the full approval of management and I have committed the necessary resources to fully implement this Plan.

I also understand my other obligations relating to the storage of oil at this facility, including, among others:

1. To report any oil discharge to navigable waters or adjoining shorelines to the appropriate authorities. Notification information is included in this Plan.
2. To review and amend this Plan whenever there is a material change at the facility that affects the potential for an oil discharge, and at least once every five years. Reviews and amendments are recorded in an attached log [See Five Year Review Log and Technical Amendment Log in Attachments 1.1 and 1.2.]
3. Optional use of a contingency plan. A contingency plan:
   a. May be used in lieu of secondary containment for qualified oil-filled operational equipment, in accordance with the requirements under §112.7(k), and;
   b. Must be prepared for flowlines and/or intra-facility gathering lines which do not have secondary containment at an oil production facility, and;
   c. Must include an established and documented inspection or monitoring program; must follow the provisions of 40 CFR part 109; and must include a written commitment of manpower, equipment and materials to expeditiously remove any quantity of oil discharged that may be harmful. If applicable, a copy of the contingency plan and any additional documentation will be attached to this Plan as Attachment 2.

I certify that I have satisfied the requirement to prepare and implement a Plan under §112.3 and all of the requirements under §112.6(a). I certify that the information contained in this Plan is true.

Signature _____ Title: _____

Name _____ Date: ____/_____/20___

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II. Record of Plan Review and Amendments

Five Year Review (§112.5(b)):

Complete a review and evaluation of this SPCC Plan at least once every five years. As a result of the review, amend this Plan within six months to include more effective prevention and control measures for the facility, if applicable. Implement any SPCC Plan amendment as soon as possible, but no later than six months following Plan amendment. Document completion of the review and evaluation, and complete the Five Year Review Log in Attachment 1.1. If the facility no longer meets Tier I qualified facility eligibility, the owner or operator must revise the Plan to meet Tier II qualified facility requirements, or complete a full PE certified Plan.

Table G-1 Technical Amendments (§§112.5(a), (c) and 112.6(a)(2))	
This SPCC Plan will be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures.	☐
Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template. *[§112.6(a)(2)]* [See Technical Amendment Log in Attachment 1.2]	☐

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III. Plan Requirements

1. Oil Storage Containers (§112.7(a)(3)(i)):

Table G-2 Oil Storage Containers and Capacities		
This table includes a complete list of all oil storage containers (aboveground containers[a] and completely buried tanks[b]) with capacity of 55 U.S. gallons or more, unless otherwise exempt from the rule. For mobile/portable containers, an estimate number of containers, types of oil, and anticipated capacities are provided.		☐
Oil Storage Container *(indicate whether aboveground (A) or completely buried (B))*	**Type of Oil**	**Shell Capacity (gallons)**

Total Aboveground Storage Capacity [c] _____ gallons

Total Completely Buried Storage Capacity _____ gallons

Facility Total Oil Storage Capacity _____ gallons

[a] Aboveground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

[b] Although the criteria to determine eligibility for qualified facilities focuses on the aboveground oil storage containers at the facility, the completely buried tanks at a qualified facility are still subject to the rule requirements and must be addressed in the template; however, they are not counted toward the qualified facility applicability threshold.

[c] Counts toward qualified facility applicability threshold.

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2. Secondary Containment and Oil Spill Control (§§112.6(a)(3)(i) and (ii), 112.7(c) and 112.9(c)(2)):

Table G-3 Secondary Containment and Oil Spill Control	
Appropriate secondary containment and/or diversionary structures or equipment[a] is provided for all oil handling containers, equipment, and transfer areas to prevent a discharge to navigable waters or adjoining shorelines. The entire secondary containment system, including walls and floor, is capable of containing oil and is 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.	☐

[a] Use one of the following methods of secondary containment or its equivalent: (1) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) Curbing; (3) Culverting, gutters, or other drainage systems; (4) Weirs, booms, or other barriers; (5) Spill diversion ponds; (6) Retention ponds; or (7) Sorbent materials.

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Table G-4 below identifies the tanks and containers at the facility with the potential for an oil discharge; the mode of failure; the flow direction and potential quantity of the discharge; and the secondary containment method and containment capacity that is provided.

Table G-4 Containers with Potential for an Oil Discharge

Area	Type of failure (discharge scenario)	Potential discharge volume (gallons)	Direction of flow for uncontained discharge	Secondary containment method[a]	Secondary containment capacity (gallons)
Bulk Storage Containers and Mobile/Portable Containers[b]					
Oil-filled Operational Equipment (e.g., hydraulic equipment, transformers)[c]					
Piping, Valves, etc.					
Product Transfer Areas (location where oil is loaded to or from a container, pipe or other piece of equipment.)					
Other Oil-Handling Areas or Oil-Filled Equipment (e.g. flow-through process vessels at an oil production facility)					

[a] Use one of the following methods of secondary containment or its equivalent: (1) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) Curbing; (3) Culverting, gutters, or other drainage systems; (4) Weirs, booms, or other barriers; (5) Spill diversion ponds; (6) Retention ponds; or (7) Sorbent materials.

[b] For storage tanks and bulk storage containers, the secondary containment capacity must be at least the capacity of the largest container plus additional capacity to contain rainfall or other precipitation.

[c] For oil-filled operational equipment: Document in the table above if alternative measures to secondary containment [as described in §112.7(k)] are implemented at the facility.

3. Inspections, Testing, Recordkeeping and Personnel Training (§§112.7(e) and (f), 112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)):

Table G-5 Inspections, Testing, Recordkeeping and Personnel Training	
An inspection and/or testing program is implemented for all aboveground bulk storage containers and piping at this facility. *[§§112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)]*	☐
The following is a description of the inspection and/or testing program (e.g. reference to industry standard utilized, scope, frequency, method of inspection or test, and person conducting the inspection) for all aboveground bulk storage containers and piping at this facility:	
Inspections, tests, and records are conducted in accordance with written procedures developed for the facility. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph. *[§112.7(e)]*	☐
A record of the inspections and tests are kept at the facility or with the SPCC Plan for a period of three years. *[§112.7(e)]* [See Inspection Log and Schedule in Attachment 3.1]	☐
Inspections and tests are signed by the appropriate supervisor or inspector. *[§112.7(e)]*	☐
Personnel, training, and discharge prevention procedures [§112.7(f)]	
Oil-handling personnel are trained 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. *[§112.7(f)]*	☐
A person who reports to facility management is designated and accountable for discharge prevention. *[§112.7(f)]* Name/Title:_____	☐
Discharge prevention briefings are conducted for oil-handling personnel annually to assure adequate understanding of the SPCC Plan for that facility. Such briefings highlight and describe past reportable discharges or failures, malfunctioning components, and any recently developed precautionary measures. *[§112.7(f)]* [See Oil-handling Personnel Training and Briefing Log in Attachment 3.4]	☐

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4. Security (excluding oil production facilities) §112.7(g):

Table G-6 Implementation and Description of Security Measures	
Security measures are implemented at this facility to prevent unauthorized access to oil handling, processing, and storage area.	☐
The following is a description of how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges:	

5. Emergency Procedures and Notifications (§112.7(a)(3)(iv) and 112.7(a)(5)):

Table G-7 Description of Emergency Procedures and Notifications
The following is a description of the immediate actions to be taken by facility personnel in the event of a discharge to navigable waters or adjoining shorelines *[§112.7(a)(3)(iv) and 112.7(a)(5)]*:

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6. Contact List (§112.7(a)(3)(vi)):

Table G-8 Contact List	
Contact Organization / Person	**Telephone Number**
National Response Center (NRC)	1-800-424-8802
Cleanup Contractor(s)	
Key Facility Personnel	
Designated Person Accountable for Discharge Prevention:	Office:
	Emergency:
	Office:
	Emergency:
	Office:
	Emergency:
	Office:
	Emergency:
State Oil Pollution Control Agencies	
Other State, Federal, and Local Agencies	
Local Fire Department	
Local Police Department	
Hospital	
Other Contact References (e.g., downstream water intakes or neighboring facilities)	

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7. NRC Notification Procedure (§112.7(a)(4) and (a)(5)):

Table G-9 NRC Notification Procedure	
In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information identified in Attachment 4 will be provided to the National Response Center immediately following identification of a discharge to navigable waters or adjoining shorelines [See Discharge Notification Form in Attachment 4]: *[§112.7(a)(4)]*	☐
• The exact address or location and phone number of the facility; • Date and time of the discharge; • Type of material discharged; • Estimate of the total quantity discharged; • Estimate of the quantity discharged to navigable waters; • Source of the discharge; • Description of all affected media; • 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 • Names of individuals and/or organizations who have also been contacted.	

8. SPCC Spill Reporting Requirements (Report within 60 days) (§112.4):

Submit information to the EPA Regional Administrator (RA) and the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located within 60 days from one of the following discharge events:

- A single discharge of more than 1,000 U.S. gallons of oil to navigable waters or adjoining shorelines or
- Two discharges to navigable waters or adjoining shorelines each more than 42 U.S. gallons of oil occurring within any twelve month period

You must submit the following information to the RA:

(1) Name of the facility;
(2) Your name;
(3) Location of the facility;
(4) Maximum storage or handling capacity of the facility and normal daily throughput;
(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;
(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
(7) The cause of the reportable discharge, including a failure analysis of the system or subsystem in which the failure occurred; and
(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence
(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge

* * * * *

NOTE: Complete one of the following sections (A, B or C)

as appropriate for the facility type.

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A. Onshore Facilities (excluding production) (§§112.8(b) through (d), 112.12(b) through (d)):

The owner or operator must meet the general rule requirements as well as requirements under this section. Note that not all provisions may be applicable to all owners/operators. For example, a facility may not maintain completely buried metallic storage tanks installed after January 10, 1974, and thus would not have to abide by requirements in §§112.8(c)(4) and 112.12(c)(4), listed below. In cases where a provision is not applicable, write "N/A".

Table G-10 General Rule Requirements for Onshore Facilities	
Drainage from diked storage areas is restrained 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. Diked areas may be emptied by pumps or ejectors that must be manually activated after inspecting the condition of the accumulation to ensure no oil will be discharged. *[§§112.8(b)(1) and 112.12(b)(1)]*	☐
Valves of manual, open-and-closed design are used for the drainage of diked areas. *[§§112.8(b)(2) and 112.12(b)(2)]*	☐
The containers at the facility are compatible with materials stored and conditions of storage such as pressure and temperature. *[§§112.8(c)(1) and 112.12(c)(1)]*	☐
Secondary containment for the bulk storage containers (including mobile/portable oil storage containers) holds the capacity of the largest container plus additional capacity to contain precipitation. Mobile or portable oil storage containers are positioned to prevent a discharge as described in §112.1(b). *[§112.6(a)(3)(ii)]*	☐
If uncontaminated rainwater from diked areas drains into a storm drain or open watercourse the following procedures will be implemented at the facility: *[§§112.8(c)(3) and 112.12(c)(3)]* • Bypass valve is normally sealed closed • Retained rainwater is inspected to ensure that its presence will not cause a discharge to navigable waters or adjoining shorelines • Bypass valve is opened and resealed under responsible supervision • Adequate records of drainage are kept [See Dike Drainage Log in Attachment 3.3]	 ☐ ☐ ☐ ☐
For completely buried metallic tanks installed on or after January 10, 1974 at this facility *[§§112.8(c)(4) and 112.12(c)(4)]*: • Tanks have corrosion protection with coatings or cathodic protection compatible with local soil conditions. • Regular leak testing is conducted.	 ☐ ☐
For partially buried or bunkered metallic tanks *[§112.8(c)(5) and §112.12(c)(5)]*: • Tanks have corrosion protection with coatings or cathodic protection compatible with local soil conditions.	 ☐
Each aboveground bulk container is tested or inspected for integrity on a regular schedule and whenever material repairs are made. Scope and frequency of the inspections and inspector qualifications are in accordance with industry standards. Container supports and foundations are regularly inspected. [See Inspection Log and Schedule and Bulk Storage Container Inspection Schedule in Attachments 3.1 and 3.2] *[§112.8(c)(6) and §112.12(c)(6)(i)]*	☐
Outsides of bulk storage containers are frequently inspected for signs of deterioration, discharges, or accumulation of oil inside diked areas. [See Inspection Log and Schedule in Attachment 3.1] *[§§112.8(c)(6) and 112.12(c)(6)]*	☐
For bulk storage containers that are subject to 21 CFR part 110 which are shop-fabricated, constructed of austenitic stainless steel, elevated and have no external insulation, formal visual inspection is conducted on a regular schedule. Appropriate qualifications for personnel performing tests and inspections are documented. [See Inspection Log and Schedule and Bulk	☐

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Table G-10 General Rule Requirements for Onshore Facilities	
Storage Container Inspection Schedule in Attachments 3.1 and 3.2] *[§112.12(c)(6)(ii)]*	
Each container is provided with a system or documented procedure to prevent overfills for the container. Describe:	☐
Liquid level sensing devices are regularly tested to ensure proper operation [See Inspection Log and Schedule in Attachment 3.1]. *[§112.6(a)(3)(iii)]*	☐
Visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts are promptly corrected and oil in diked areas is promptly removed. *[§§112.8(c)(10) and 112.12(c)(10)]*	☐
Aboveground valves, piping, and appurtenances such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are inspected regularly. [See Inspection Log and Schedule in Attachment 3.1] *[§§112.8(d)(4) and 112.12(d)(4)]*	☐
Integrity and leak testing are conducted on buried piping at the time of installation, modification, construction, relocation, or replacement. [See Inspection Log and Schedule in Attachment 3.1] *[§§112.8(d)(4) and 112.12(d)(4)]*	☐

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B. Onshore Oil Production Facilities (excluding drilling and workover facilities) (§112.9(b), (c), and (d)):

The owner or operator must meet the general rule requirements as well as the requirements under this section. Note that not all provisions may be applicable to all owners/operators. In cases where a provision is not applicable, write "N/A".

Table G-11 General Rule Requirements for Onshore Oil Production Facilities	
At tank batteries, separation and treating areas, drainage is closed and sealed except when draining uncontaminated rainwater. Accumulated oil on the rainwater is returned to storage or disposed of in accordance with legally approved methods. *[§112.9(b)(1)]*	☐
Prior to drainage, diked areas are inspected and *[§112.9(b)(1)]*: • Retained rainwater is inspected to ensure that its presence will not cause a discharge to navigable waters • Bypass valve is opened and resealed under responsible supervision • Adequate records of drainage are kept [See Dike Drainage Log in Attachment 3.3]	☐ ☐ ☐
Field drainage systems and oil traps, sumps, or skimmers are inspected at regularly scheduled intervals for oil, and accumulations of oil are promptly removed [See Inspection Log and Schedule in Attachment 3.1] *[§112.9(b)(2)]*	☐
The containers used at this facility are compatible with materials stored and conditions of storage. *[§112.9(c)(1)]*	☐
All tank battery, separation, and treating facility installations (except for flow-through process vessels) are constructed with a capacity to hold the largest single container plus additional capacity to contain rainfall. Drainage from undiked areas is safely confined in a catchment basin or holding pond. *[§112.9(c)(2)]*	☐
Except for flow-through process vessels, containers that are on or above the surface of the ground, including foundations and supports, are visually inspected for deterioration and maintenance needs on a regular schedule. [See Inspection Log and Schedule in Attachment 3.1] *[§112.9(c)(3)]*	☐
New and old tank batteries at this facility are engineered/updated in accordance with good engineering practices to prevent discharges including at least one of the following: (i) adequate container capacity to prevent overfill if regular pumping/gauging is delayed; (ii) overflow equalizing lines between containers so that a full container can overflow to an adjacent container; (iii) vacuum protection to prevent container collapse; or (iv) high level sensors to generate and transmit an alarm to the computer where the facility is subject to a computer production control system. *[§112.9(c)(4)]*	☐
Flow-through process vessels and associated components are: • Are constructed with a capacity to hold the largest single container plus additional capacity to contain rainfall. Drainage from undiked areas is safely confined in a catchment basin or holding pond; *[§112.9(c)(2)]* and • That are on or above the surface of the ground, including foundations and supports, are visually inspected for deterioration and maintenance needs on a regular schedule. [See Inspection Log and Schedule in Attachment 3.1] *[§112.9(c)(3)]* *Or* • Visually inspected and/or tested periodically and on a regular schedule for leaks, corrosion, or other conditions that could lead to a discharge to navigable waters; and • Corrective action or repairs are applied to flow-through process vessels and any associated components as indicated by regularly scheduled visual inspections, tests, or evidence of an oil discharge; and • Any accumulations of oil discharges associated with flow-through process vessels are promptly removed; and	☐ ☐ ☐ ☐ ☐

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Table G-11 General Rule Requirements for Onshore Oil Production Facilities	
• Flow-through process vessels are provided with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation within six months of a discharge from flow-through process vessels of more than 1,000 U.S. gallons of oil in a single discharge as described in §112.1(b), or a discharge more than 42 U.S. gallons of oil in each of two discharges as described in §112.1(b) within any twelve month period. *[§112.9(c)(5)]* *(Leave blank until such time that this provision is applicable.)*	☐
All aboveground valves and piping associated with transfer operations are inspected periodically and upon a regular schedule. The general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items are included in the inspection. [See Inspection Log and Schedule in Attachment 3.1] *[§112.9(d)(1)]*	☐
An oil spill contingency plan and written commitment of resources are provided for flowlines and intra-facility gathering lines [See Oil Spill Contingency Plan and Checklist in Attachment 2 and Inspection Log and Schedule in Attachment 3.1] *[§112.9(d)(3)]*	☐
or Appropriate secondary containment and/or diversionary structures or equipment is provided for flowlines and intra-facility gathering lines to prevent a discharge to navigable waters or adjoining shorelines. The entire secondary containment system, including walls and floor, is capable of containing oil and is constructed so that any discharge from the pipe, will not escape the containment system before cleanup occurs.	☐
A flowline/intra-facility gathering line maintenance program to prevent discharges from each flowline has been established at this facility. The maintenance program addresses each of the following:	☐
• Flowlines and intra-facility gathering lines and associated valves and equipment are compatible with the type of production fluids, their potential corrosivity, volume, and pressure, and other conditions expected in the operational environment;	☐
• Flowlines, intra-facility gathering lines and associated appurtenances are visually inspected and/or tested on a periodic and regular schedule for leaks, oil discharges, corrosion, or other conditions that could lead to a discharge as described in §112.1(b). The frequency and type of testing allows for the implementation of a contingency plan as described under part 109 of this chapter.	☐
• Corrective action and repairs to any flowlines and intra-facility gathering lines and associated appurtenances as indicated by regularly scheduled visual inspections, tests, or evidence of a discharge.	☐
• Accumulations of oil discharges associated with flowlines, intra-facility gathering lines, and associated appurtenances are promptly removed. *[§112.9(d)(4)]*	☐
The following is a description of the flowline/intra-facility gathering line maintenance program implemented at this facility:	

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C. Onshore Oil Drilling and Workover Facilities (§112.10(b), (c) and (d)):

The owner or operator must meet the general rule requirements as well as the requirements under this section.

Table G-12 General Rule Requirements for Onshore Oil Drilling and Workover Facilities	
Mobile drilling or worker equipment is positioned or located to prevent discharge as described in §112.1(b). *[§112.10(b)]*	☐
Catchment basins or diversion structures are provided to intercept and contain discharges of fuel, crude oil, or oily drilling fluids. *[§112.10(c)]*	☐
A blowout prevention (BOP) assembly and well control system was installed before drilling below any casing string or during workover operations. *[§112.10(d)]*	☐
The BOP assembly and well control system is capable of controlling any well-head pressure that may be encountered while the BOP assembly and well control system are on the well. *[§112.10(d)]*	☐

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ATTACHMENT 1 – Five Year Review and Technical Amendment Logs

ATTACHMENT 1.1 – Five Year Review Log

I have completed a review and evaluation of the SPCC Plan for this facility, and will/will not amend this Plan as a result.

Table G-13 Review and Evaluation of SPCC Plan for Facility			
Review Date	Plan Amendment		Name and signature of person authorized to review this Plan
	Will Amend	Will Not Amend	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

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ATTACHMENT 1.2 – Technical Amendment Log

Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template.

Table G-14 Description and Certification of Technical Amendments		
Review Date	Description of Technical Amendment	Name and signature of person certifying this technical amendment

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ATTACHMENT 2 – Oil Spill Contingency Plan and Checklist
An oil spill contingency plan and written commitment of resources is required for:

- Flowlines and intra-facility gathering lines at oil production facilities and
- Qualified oil-filled operational equipment which has no secondary containment.

An oil spill contingency plan meeting the provisions of 40 CFR part 109, as described below, and a written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful is attached to this Plan.	☐

Complete the checklist below to verify that the necessary operations outlined in 40 CFR part 109 - Criteria for State, Local and Regional Oil Removal Contingency Plans - have been included.

Table G-15 Checklist of Development and Implementation Criteria for State, Local and Regional Oil Removal Contingency Plans (§109.5)[a]	
(a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved in planning or directing oil removal operations.	☐
(b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:	
(1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.	☐
(2) A current list of names, telephone numbers and addresses of the responsible persons (with alternates) and organizations to be notified when an oil discharge is discovered.	☐
(3) Provisions for access to a reliable communications system for timely notification of an oil discharge, and the capability of interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans (e.g., NCP).	☐
(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.	☐
(c) Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:	
(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.	☐
(2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.	☐
(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.	☐
(d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:	
(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.	☐
(2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.	☐

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Table G-15 Checklist of Development and Implementation Criteria for State, Local and Regional Oil Removal Contingency Plans (§109.5)[a]	
(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.	☐
(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.	☐
(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.	☐
(6) Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.	☐

[a] The contingency plan must be consistent with all applicable state and local plans, Area Contingency Plans, and the National Contingency Plan (NCP).

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ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with §§112.6(a)(3)(iii), 112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1), 112.9(d)(4), 112.12.(c)(6), and 112.12(d)(4), as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately [a]
					☐
					☐
					☐
					☐
					☐

[a] Indicate in the table above if records of facility inspections are maintained separately at this facility.

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production):

To comply with integrity inspection requirement for bulk storage containers, inspect/test each shop-built aboveground bulk storage container on a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table.

Table G-17 Bulk Storage Container Inspection Schedule

Container Size and Design Specification	Inspection requirement
Portable containers (including drums, totes, and intermodal bulk containers (IBC))	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas
55 to 1,100 gallons with sized secondary containment	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas plus any annual inspection elements per industry inspection standards
1,101 to 5,000 gallons with sized secondary containment and a means of leak detection[a]	
1,101 to 5,000 gallons with sized secondary containment and no method of leak detection[a]	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas, plus any annual inspection elements and other specific integrity tests that may be required per industry inspection standards

[a] Examples of leak detection include, but are not limited to, double-walled tanks and elevated containers where a leak can be visually identified.

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ATTACHMENT 3.3 – Dike Drainage Log

Table G-1 8 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		
	☐	☐	☐	☐		

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ATTACHMENT 3.4 – Oil-handling Personnel Training and Briefing Log

Table G-19 Oil-Handling Personnel Training and Briefing Log		
Date	Description / Scope	Attendees

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ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge			
Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	☐ Soil ☐ Water (specify) _____ ☐ Other (specify) _____
Actions taken			
Damage or injuries	☐ No ☐ Yes (specify)	Evacuation needed?	☐ No ☐ Yes (specify)
Organizations and individuals contacted	☐ National Response Center 800-424-8802 Time _____		
	☐ Cleanup contractor (Specify) Time _____		
	☐ Facility personnel (Specify) Time _____		
	☐ State Agency (Specify) Time _____		
	☐ Other (Specify) Time _____		

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[74 FR 58811, Nov. 13, 2009]

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APPENDIX G
Florida DEP Petroleum Storage System Regulations - ASTs

CHAPTER 62-762 ABOVEGROUND STORAGE TANK SYSTEMS

62-762.101 Intent.

(1) Except for aboveground mineral acid storage tank systems, the purpose of this chapter is to provide standards for the registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances, and to minimize the occurrence and environmental risks of releases and discharges. This chapter provides standards for aboveground storage tank systems having individual storage tank capacities greater than 550 gallons.

(2) For mineral acid storage tank systems, the purpose of this chapter is to minimize the occurrence and environmental risks of discharges from aboveground storage tanks having capacities greater than 110 gallons that contain hydrobromic, hydrochloric, hydrofluoric, phosphoric or sulfuric acid. Mineral acid storage tank systems are only subject to Rule 62-762.891, F.A.C.

(3) The purpose of this chapter is to establish a registration program for compression vessels and aboveground hazardous substance storage tank systems with individual capacities greater than 110 gallons. These systems are only subject to subsections 62-762.401(1)-(2), F.A.C.

(4) This chapter implements the requirements of Chapter 376, F.S. Final agency action related to the functions that may be carried out by a locally administered program (County) under contract with the Department pursuant to Section 376.3073, F.S., shall be taken by the Department.

Specific Authority 376.303, 376.322(3) FS. Law Implemented 376.303, 376.322(3), 376.3073 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.100.*

62-762.201 Definitions.

The following words, phrases or terms used in this chapter, unless the context indicates otherwise, shall have the following meaning:

(1) "Airport or seaport hydrant piping" means the pressurized integral piping system, including hydrant pits, associated with petroleum storage tank systems serving airports, seaports, or military bases.

(2) "Ammonia" includes organic amines and inorganic compounds that are liquids at standard temperature and pressure that, when discharged, release free amonia (NH_3), or ammonium ion (NH_4^+).

(3) "AST" means an aboveground storage tank.

(4) "AST Category-A system" means a system that was installed on or before March 12, 1991.

(5) "AST Category-B system" means a system that was installed after March 12, 1991, and before July 13, 1998.

(6) "AST Category-C system" means a system that was installed on or after July 13, 1998. ASTs that are removed and relocated after July 13, 1998 are considered Category-C systems.

(7) "Bulk product facility" means a waterfront location with at least one aboveground tank with a capacity greater than 30,000 gallons that is used for the storage of pollutants.

(8) "Bulk product piping" means on-site integral piping with an internal diameter greater than three inches that:

(a) Originates at the first stationary or landward valve from a vessel loading or unloading area, and that delivers regulated substances up to and including the first valve within the dike field area of a bulk product facility; or

(b) Is utilized for transporting regulated substances.

(9) "Cathodic protection" means a method of preventing corrosion of a metal surface by making that surface the cathode of an electrochemical cell through the use of devices such as galvanic anodes or impressed current.

(10) "Cathodic Protection Tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

(11) "Chlorine" includes organic and inorganic compounds that are liquids at standard temperature and pressure that, when discharged, may release free chlorine (Cl_2) or chlorides (Cl^-).

(12) "Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the storage tank system under conditions likely to be encountered in the storage tank system.

(13) "Compression vessel" means any stationary aboveground container, tank, or on-site integral piping system, or combination thereof, that has a capacity of greater than 110 gallons and that is primarily used to store pollutants or hazardous substances above atmospheric pressure or at a reduced temperature in order to lower the vapor pressure of the contents. Manifold

compression vessels that function as a single vessel shall be considered as one vessel.

(14) “Contamination” or “contaminated” means the presence of regulated substances in surface water, groundwater, soil, sediment, or upon the land, in quantities that result in exceedances of applicable cleanup target levels in Chapter 62-770, F.A.C., where petroleum or petroleum products are present, or water quality standards in Chapter 62-3, 62-302, 62-520, or 62-550, F.A.C.

(15) “Corrosion professional” means a person who, by reason of knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal components of a storage tank system. Corrosion Professionals shall be accredited or certified by NACE International, or be a professional engineer registered in the State of Florida.

(16) “County” means a locally administered program under contract with the Department to perform compliance verification activities at facilities with storage tank systems.

(17) “Cut and cover tank” means a tank that is constructed with steel or reinforced concrete that is surrounded by soil above the natural surface of the ground.

(18) “Dike field area” means the area around the tank or tanks that extends from the circumference of the base of an AST to the top of the berm, dike, or retaining wall surrounding the tank.

(19) “Discharge” includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any regulated substance which occurs and which affects lands and the surface and ground waters of the state.

(20) “Discovery” means:

(a) Either actual knowledge or knowledge of facts that could reasonably lead to actual knowledge of the existence of an incident, discharge, or an unmaintained storage tank system; or

(b) Discovery as specified in the Petroleum Contamination Site Cleanup Criteria subsection 62-770.200(7), F.A.C.

(21) “Dispenser” means a dispensing system that is used to transfer vehicular fuel from a fixed point to a vehicle.

(22) “Dispenser liner” means a liner installed as secondary containment beneath a dispenser to prevent discharges of regulated substances.

(23) “Dispensing system” means equipment that is used to transfer regulated substances from integral piping through a rigid or flexible hose or pipe to another point of use outside of the storage tank system.

(24) “Double-bottomed” means an AST that has secondary containment in the form of an outer tank bottom having a closed interstitial space between the primary tank bottom and the secondary outer tank bottom.

(25) “Double-walled” means a storage tank that has an outer tank wall, or integral piping that has an outer wall that provides secondary containment of the primary tank or piping.

(26) “Empty” means all regulated substances have been removed so that no more than one inch in depth or 0.3 percent by weight of total system capacity of regulated substances remains in the storage tank system.

(27) “Existing contamination” means:

(a) The presence of free product or sheen on the groundwater;

(b) The presence of vapor levels in monitoring wells measured in accordance with DEP’s “Guidelines for Vapor Monitoring” or by a Flame Ionization Detector or an equivalent instrument in excess of:

1. 500 parts per million total petroleum hydrocarbons for storage tank systems containing gasoline or equivalent petroleum products; or

2. 50 parts per million total petroleum hydrocarbons for storage tank systems containing kerosene, diesel or other equivalent petroleum products;

(c) Results of analytical tests on a groundwater sample that:

1. Exceed the cleanup target levels for petroleum products’ chemicals of concern specified in Table V of Chapter 62-770, F.A.C.; or

2. Indicate the presence of a hazardous substance that is not described in subparagraph (c)1. above; or

3. Indicate the presence of a regulated substance that is not described in subparagraph (c)1. above; or

(d) After July 13, 1998, results of analytical tests on a soil sample that:

1. Exceed the lower of direct exposure I and leachability Table V cleanup target levels for petroleum products’ chemicals of concern listed in Table IV of Chapter 62-770, F.A.C.; or

2. Indicate the presence of a hazardous substance that is not described in subparagraph (d)1. above; or

3. Indicate the presence of a regulated substance that is not described in subparagraph (d)1. above.

(28) “Facility” means a nonresidential location containing, or that contained, any stationary tank or tanks containing, or that

contained regulated substances, and that have, or had, individual capacities greater than 550 gallons for AST systems.

(29) “Field-erected storage tank” means an AST that is constructed by assembling it on-site at the facility.

(30) “Flow-through process tank” is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks include tanks associated with vapor recovery units and oil-water separators. Flow-through process tanks do not include storage tanks used for the storage of regulated substances before their introduction into the production process or for the storage of finished products or by-products from the production process.

(31) “Free product” means a regulated substance in excess of 0.01 foot in thickness, measured at its thickest point, floating on water, surface water or groundwater.

(32) “Hazardous substances” means those substances defined as hazardous substances in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96-510, 94 stat. 2767, as amended by the Superfund Amendments and Reauthorization Act of 1986.

(33) “Heating oil” means any petroleum based fuel used in the operation of heating equipment, boilers, or furnaces.

(34) “High viscosity” means a pollutant with a viscosity of 30 centistokes (cSt) and higher at 40 degrees Centigrade, such as American Society for Testing and Materials (ASTM) grades 5 and 6 residual oils, intermediate fuel oils, or Bunker C fuel.

(35) “Hydraulic lift tank” means a tank that holds hydraulic fluid for a closed-loop mechanical system used to operate lifts, elevators, and other similar devices.

(36) “Hydrostatic test” means a test for a storage tank or storage tank system component that is performed in accordance with this chapter using equilibrium and the pressure of liquids to test the integrity of the tank or system component.

(37) “Impervious” means:

(a) A synthetic material or another material approved in accordance with subsection 62-762.851(2), F.A.C., that is compatible with the stored regulated substance, and has a permeability rate to the regulated substance stored of 1×10^{-7} cm/sec or less; or

(b) For concrete structures, a material that:

1. Meets the design and construction standards of ACI 350R-89 and ACI 224R-89; or

2. Is applied to the concrete in accordance with NACE International Standard RP0892-92.

(38) “In contact with the soil” means integral piping connected to ASTs or any portion of a tank, that:

(a) Physically touches the soil; or

(b) Is not in direct contact with the soil, and is separated from the soil only by a casing, wrapping, or other material that is not impervious.

(c) Those portions of integral piping that are elevated and that are not in direct contact with the soil are excluded from this definition.

(39) “Incident” is a condition or situation indicating that a discharge may have occurred from a storage tank system.

(40) “Industrial occupancy building” is an enclosed structure that contains an AST system that is used in association with an industrial or manufacturing process, or for electric power generating utilities, provided that the building was constructed and is used primarily for industrial, manufacturing, or electric power generating purposes, and not solely for the purpose of storing regulated substances. An industrial occupancy building is a structure that has an impervious floor without valves, drains, or other openings that would permit pollutants to be discharged. Industrial occupancy buildings constructed after July 13, 1998, must:

(a) Be constructed in accordance with NFPA 30, Section 2-5, Installation of Tanks Inside of Buildings, and Section 5-3, Facility Design;

(b) Have at least Type II construction in accordance with NFPA 220, Chapter 3;

(c) Be ventilated in accordance with NFPA 68 and 69; and

(d) Be verified as meeting the above construction requirements by either a registered architect or a professional engineer registered in the State of Florida.

(41) “In-service” means a storage tank system that is being actively maintained and operated in accordance with this chapter. Non-compliance with any specific rule within this chapter does not exclude the system from being considered “in-service.” Subject to the above, a storage tank system is also considered to be in-service if it:

(a) Contains regulated substances or has regulated substances regularly added to or withdrawn from the system;

(b) Is emptied solely for the purpose of cleaning, routine maintenance, or a change in product, for a time period not exceeding 45 days; or

(c) Contains non-regulated substances and is still maintained in an in-service status at the request of the owner or operator.

(42) “Integral piping” means on-site piping, originating or terminating at the regulated storage tank or tanks, that conveys regulated substances. Vapor recovery lines, pipeline facilities, and vent lines are not considered integral piping. Integral piping is not considered on-site if the piping crosses state boundaries, or two or more county boundaries. Integral piping includes all valves, elbows, joints, flanges, pumps, and flexible connectors, up to the:

(a) Union of the piping with the dispensing system;

(b) Fill cap or fill valve;

(c) Forwarding pump used for transferring regulated substances to a flow-through process tank or an industrial production or manufacturing point of use; or

(d) First flange or connection within the loading rack containment area.

(43) “Internal lining” means a material that is applied internally on AST bottoms or USTs to protect the tank from internal corrosion.

(44) “Interstitial monitoring” is a release detection method that is used to determine the presence of regulated substances or water between the primary and secondary containment. Interstitial monitoring can be performed within:

(a) A closed interstitial space between two steel or impervious barriers that are sealed, not open to the atmosphere, and designed to be tested for a breach of integrity of the interstitial space; or

(b) An open interstitial space between two steel or impervious barriers that are open to the atmosphere, and not designed to be tested for a breach of integrity of the interstitial space.

(45) “Liner” means an impervious material that meets the performance standards of paragraph 62-762.501(1)(e), F.A.C., that is used externally as a method of secondary containment.

(46) “Liquid trap” means sumps, well cellars, and other traps used in association with oil and gas production, gathering and extraction operations (including gas production plants) to collect oil, water, and other liquids. Liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

(47) “Maintenance” means the normal operational upkeep to prevent a storage tank system from releasing regulated substances.

(48) “Mobile tank” is:

(a) An AST that is moved to a different location at least once every 180 days; and

1. Has a current valid vehicle registration with the Florida Department of Highway Safety and Motor Vehicles and has current test and inspection markings in accordance with 49 C.F.R. 180.415; or

2. Is designed and constructed to be moved to other service locations, and its relocation within a facility or from site to site is inherent in its use; or

3. Is used for on-site construction activities, provided that the construction activities do not exceed 12 months, or the life of the construction project as long as construction is continuous, and the tanks are removed from the site when the construction is complete; and

(b) Not considered mobile if it is connected to stationary underground or aboveground integral piping, unless associated with the production of an agricultural commodity, provided that the tank is moved to a different location at least once every 180 days.

(49) “Nationally Recognized Laboratory” means an organization that can perform quantitative and qualitative tests on storage tank system equipment, evaluate the test data and equipment performance, and make determinations of the equipment’s capability of meeting the technical standards of this chapter. A Nationally Recognized Laboratory shall have at least five years of professional storage tank system equipment testing experience. Nationally Recognized Laboratories include organizations such as Underwriter’s Laboratories, Carnegie Mellon Research Institute, Midwest Research Institute, Ken Wilcox Associates, Factory Mutual, and American Board of Engineering and Technology (ABET) Accredited Universities.

(50) “On-site” means on the same or geographically contiguous property as the facility regulated under this chapter, that is under the same ownership or control, and which may be divided by a public or private right-of-way or an easement. Piping connecting ASTs with pipeline facilities are considered on-site up to the point where it crosses through the dike wall surrounding the AST.

(51) “Operational life” refers to the period from the start of installation of the storage tank system to the completion of the closure of the storage tank system in accordance with subsection 62-762.801(3), F.A.C.

(52) “Operator” means any person operating a facility, whether by lease, contract, or other form of agreement.

(53) “Out-of-service” means a storage tank system that:

(a) Is designated as an out-of-service system by owner or operator notification to the Department on Form 62-761.900(2);

(b) Is empty as defined in subsection 62-762.201(26), F.A.C.; and

(c) Does not have regulated substances transferred into or withdrawn from the tank as specified in subsection 62-762.801(2), F.A.C., for a maximum time of:

1. Two years of being taken out-of-service for USTs; or

2. Five years of being taken out-of-service for ASTs; or

3. Ten years of being taken out-of-service for storage tank systems with secondary containment.

(54) "Overfill" is a release or discharge that occurs when a tank is filled beyond its capacity.

(55) "Owner" means any person as defined in Section 376.301(23), F.S., owning a facility.

(56) "Pesticides" means all preparations, products, and substances included in the Department of Agriculture and Consumer Services' Rule 5E-2.002, F.A.C.

(57) "Petroleum" includes:

(a) Oil, including crude petroleum oil and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary methods and which are not the result of condensation of gas after it leaves the reservoir; and

(b) All natural gas, including casinghead gas, and all other hydrocarbons not defined as oil in paragraph (a).

(58) "Petroleum product" means any liquid fuel commodity made from petroleum.

(a) Forms of fuel considered to be petroleum products include all fuels known or sold as:

1. Diesel fuel;

2. Kerosene;

3. Gasoline; and

4. Fuels containing mixtures of gasoline and other products.

(b) Forms of fuel excluded from this definition are:

1. Liquefied petroleum gas;

2. American Society for Testing and Materials (ASTM) grades no. 5 and no. 6 residual oils;

3. Bunker C residual oils;

4. Intermediate fuel oils used for marine bunkering with a viscosity of 30 and higher;

5. Asphalt oils; and

6. Petrochemical feedstocks.

(59) "Pipe" or "piping" means any hollow cylindrical or tubular conveyance through which regulated substances flow.

(60) "Pipeline facilities" are pipe systems, rights-of-way and any associated equipment, gathering lines, buildings, or break-out tanks necessary for the long range transportation of regulated substances.

(61) "Piping sump" or "Submersible turbine pump sump" means a liner installed as secondary containment or a monitoring port at the top of a tank or at the lowest point in the integral piping to detect releases.

(62) "Pollutants" includes any "product" as defined in Section 377.19(11), F.S., pesticides, ammonia, chlorine, and derivatives thereof, excluding liquefied petroleum gas.

(63) "Pressure test" means a test to determine the integrity of integral piping performed in accordance with subparagraph 62-762.641(3)(e)1., F.A.C.

(64) "Pressurized piping" means piping through which regulated substances flow due to a pump that is not located at the dispensing system.

(65) "Product" as defined in Section 377.19(11), F.S., means any commodity made from oil or gas and includes refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, gas oil, casinghead gasoline, natural gas gasoline, naphtha, distillate, condensate, gasoline, used oil, kerosene, benzene, wash oil, blended gasoline, lubricating oil, blends or mixtures of oil with one or more liquid products or byproducts derived from oil or gas, and blends or mixtures of two or more liquid products or byproducts derived from oil or gas, whether hereinabove enumerated or not.

(66) "Regulated substance" means a liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), that is a pollutant when stored in an AST.

(67) "Release" means:

(a) A discharge; or

(b) A loss of regulated substances from a storage tank system into the system's secondary containment.

(68) “Release detection” means a method of:

(a) Determining whether a discharge of regulated substances has occurred; or

(b) Detecting the presence of regulated substances within a storage tank system’s secondary containment.

(69) “Release detection response level” is the point of measurement, calculation, observation, or level that is established for each individual release detection device or method at which an investigation must be initiated to determine if an incident, release, or discharge has occurred.

(70) “Repair” means to restore or replace any defective or damaged parts of a storage tank system. Replacement of a non-defective part is not a repair.

(71) “Residential storage tank system” means a storage tank system that is located on property used primarily for dwelling purposes, and the storage and use of regulated substances in the tank is for residential purposes.

(72) “Secondary containment” means a release detection and prevention system that meets the performance standards of paragraph 62-762.501(1)(e), F.A.C., and includes dispenser liners, piping sumps, double-walled tanks and piping systems, or single-walled tanks or piping systems that are contained within a liner or an impervious containment area. A Release Prevention Barrier, as specified in API Standard 650, Appendix I, is considered secondary containment for field-erected aboveground storage tank bottoms.

(73) “Sheen” means a regulated substance less than or equal to 0.01 foot in thickness, measured at its thickest point, or visibly observed, floating on surface water, groundwater, or within secondary containment.

(74) “Shop-fabricated storage tank” means an AST that is constructed at the tank manufacturer’s plant and transported to the facility for installation.

(75) “Significant loss or gain” means the sum of losses and gains of a regulated substance over a 30 day or monthly period that exceeds:

(a) For tanks with capacities between 111 and 2,000 gallons with an individual flow-through less than 5,000 gallons during the previous 30 days:

1. One percent of the tank capacity; or

2. One percent of the total weekly output; or

3. Fifty gallons, whichever is greatest.

(b) For tanks with capacities between 2001 and 29,999 gallons, or tanks with an individual flow-through exceeding 5,000 gallons during the previous 30 days:

1. One percent of the tank capacity; or

2. One percent of the amount of product dispensed during the previous 30 days, plus 130 gallons, whichever is greatest.

(c) For tanks with capacities of 30,000 gallons or greater:

1. One percent of the tank capacity; or

2. One half of one percent of the amount of product dispensed during the previous 30 days, whichever is greater.

(76) “Small diameter piping” means integral piping with an internal diameter of three inches or less that is utilized for transporting regulated substances.

(77) “Storage tank system” means a tank used to contain regulated substances, its integral piping, and all its components, including dispensing systems, spill containment devices, overfill protection devices, secondary containment systems, and any associated release detection equipment.

(78) “Suction piping” means piping through which regulated substances flow due to a pump located at the dispensing system.

(79) “Tank” means an enclosed stationary container or structure that is designed or used to store regulated substances, and the volume of which, including the volume of underground piping, is less than ten percent beneath the surface of the ground. For purposes of this chapter, cut and cover tanks are considered aboveground storage tanks.

(80) “Temporary out-of-service” is a designation of a service status for a field-erected storage tank system that is emptied solely for the purpose of cleaning, routine maintenance, or change of product for a time period exceeding thirty days, but less than six months.

(81) “UST” means an underground storage tank.

(82) “Unmaintained” means:

(a) A storage tank system that was not closed in accordance with Department rules; or

(b) An out-of-service storage tank system that is not returned to in-service status within:

1. Five years of its being out-of-service for ASTs; or

2. Ten years of its being out-of-service for storage tank systems with secondary containment.

(83) "Upgrade" means the addition or retrofit of cathodic protection, internal lining, spill prevention, overfill protection, or secondary containment, to a storage tank system, or the installation of single wall corrosion resistant storage tanks, to improve the ability of the storage tank system to prevent discharges of regulated substances.

(84) "Vehicular fuel" means a petroleum product used to fuel motor vehicles, including aircraft, watercraft, and vehicles used on and off roads and rails.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.200.*

62-762.211 Reference Standards.

(1) Referenced standards are available for inspection at the County Offices, and the Department of Environmental Protection's District and Tallahassee Offices, and may be obtained from the following sources:

(a) ACI International (American Concrete Institute), Post Office Box 9094, Farmington Hills, Michigan 48333-9094, (248) 848-3700;

(b) American Petroleum Institute (API), 1220 L Street, N.W. Washington, D.C. 20005, (202) 682-8000;

(c) ASME International (The American Society of Mechanical Engineers), 22 Law Drive, Box 2300, Fairfield, New Jersey 07007-2300, (800) 843-2763;

(d) Florida Department of Environmental Protection (DEP), Storage Tank Regulation Section, 2600 Blair Stone Road, MS 4525, Tallahassee, Florida 32399-2400, (850) 245-8839;

(e) NACE International (National Association of Corrosion Engineers), Post Office Box 218340, Houston, Texas 77218-8340, (281) 492-0535;

(f) National Fire Protection Association (NFPA), 1 Battery March Park, Post Office Box 9101, Quincy, Massachusetts 02269-9101, (800) 344-3555;

(g) Petroleum Equipment Institute (PEI), Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918) 494-9696;

(h) Society for Protective Coatings (SSPC) 40 24th Street, 6th Floor, Pittsburgh, Pennsylvania 15222-4643, (412) 281-2331;

(i) Steel Tank Institute (STI), 570 Oakwood Road, Lake Zurich, Illinois 60047, (847) 438-8265;

(j) Underwriters Laboratories (UL), 333 Pfingsten Road, Northbrook, Illinois 60062-2096, (847) 272-8800; and

(k) Government Printing Office, Superintendent of Documents, Attention: New Orders, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800.

(2) Titles of documents. References to documents listed in paragraphs (a) through (k) below are made throughout this chapter. Each document or part thereof is adopted and incorporated as a standard only to the extent that it is specifically referenced in this chapter.

(a) ACI International:

1. ACI 224R-89, "Control of Cracking in Concrete Structures," May, 1990; and

2. ACI 350R-89, "Environmental Engineering Concrete Structures," June, 1990.

(b) American Petroleum Institute Standards:

1. API Specification 12B, "Specification for Bolted Tanks for Storage of Production Liquids," February, 1995;

2. API Specification 12D, "Specification for Field Welded Tanks for Storage of Production Liquids," November, 1994;

3. API Specification 12F, "Specification for Shop Welded Tanks for Storage of Production Liquids," November, 1994, with Addenda 1, February, 1997;

4. API Specification 12P, "Specification for Fiberglass Reinforced Plastic Tanks," January, 1995;

5. API Standard 570, "Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems," June, 1993;

6. API Standard 620, "Design and Construction of Large Welded Low-pressure Storage Tanks", February, 1996, with Addenda 1, December, 1996, with Additional Pages for Addendum 1, February, 1997;

7. API Standard 650, "Welded Steel Tanks for Oil Storage," July, 1993, with Addendum 1, December, 1994, Addendum 2, December, 1995, and Addendum 3, December, 1996;

8. API Recommended Practice 651, "Cathodic Protection of Aboveground Petroleum Storage Tanks," April, 1991;

9. API Recommended Practice 652, "Lining of Aboveground Petroleum Storage Tank Bottoms," April, 1991;

10. API Standard 653, “Tank Inspection, Repair, Alteration and Reconstruction,” December, 1995, with Addendum 1, December, 1996;

11. API Recommended Practice 1110, “Recommended Practice for the Pressure Testing of Liquid Petroleum Pipelines,” December, 1991; and

12. API Recommended Practice 2350, “Overfill Protection for Petroleum Storage Tanks,” January, 1996.

(c) ASME International:

1. B31.4-1992, “Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols” January, 1993 with 1994 Addenda; and

2. B96.1-1993, “Welded Aluminum-Alloy Storage Tanks,” June, 1993.

(d) Florida Department of Environmental Protection:

1. “Storage Tank System Closure Assessment Requirements” April, 1998;

2. “Guidelines for Vapor Monitoring,” April, 1998; and

3. “Guidelines for Site-Suitability Determinations for External Monitoring,” February, 1998.

(e) NACE International:

1. NACE Standard RP-0169-96, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems,” September, 1996;

2. NACE Standard RP-0892-92, “Linings over Concrete for Immersion Service,” December, 1992; and

3. NACE Standard RP-0193-93, “External Cathodic Protection of On-Grade Metallic Storage Tank Bottoms,” October, 1993.

(f) National Fire Protection Association:

1. NFPA 30, “Flammable and Combustible Liquids Code,” August, 1996;

2. NFPA 30A, “Automotive and Marine Service Station Code,” August, 1996;

3. NFPA 329, “Handling Underground Releases of Flammable and Combustible Liquids,” Chapters 3, 4, and 5, August, 1992;

4. NFPA 68, “Guide for Venting of Deflagrations,” February, 1994;

5. NFPA 69, “Standard on Explosion Prevention Systems,” February, 1997; and

6. NFPA 220, “Standard on Types of Building Construction,” Chapter 3, August, 1995.

(g) Petroleum Equipment Institute: PEI/RP200-96, “Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling,” 1996.

(h) Society for Protective Coatings:

1. SSPC-TU 2/NACE 6G197, SSPC Publication No. 97-04, “Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment,” February, 1997; and

2. SSPC-PA 1, “Paint Application Specification No. 1,” August, 1991.

(i) Steel Tank Institute:

1. STI R892-89, “Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems,” 1989;

2. STI F911-93, “Standard for Diked Aboveground Storage Tanks,” November, 1993; and

3. STI F921, “Standard for Aboveground Tanks with Integral Secondary Containment,” April, 1996.

(j) Underwriters Laboratories Standards:

1. UL 142, “Steel Aboveground Tanks for Flammable and Combustible Liquids,” April, 1993;

2. UL 567, “Pipe Connectors for Petroleum Products and LP Gas,” June, 1996;

3. UL 971, “Nonmetallic Underground Piping for Flammable Liquids,” October, 1995; and

4. UL 2085 “Protected Aboveground Tanks for Flammable and Combustible Liquids,” December, 1997.

(m) Government Printing Office, Code of Federal Regulations:

1. Title 33, Part 154, July 1997;

2. Title 33, Part 156.170, July 1997;

3. Title 40, Part 112, July 1997;

4. Title 40, Part 280, Subpart H, July 1997;

5. Title 40, Part 302, July 1997; and

6. Title 49, Part 180.415, October, 1996.

(3) Applicability of Reference Standards: Unless otherwise specified in this rule, Category-A and Category-B facilities are subject to the Reference Standards listed in the Department’s storage tank rules that were in effect at the time of facility

construction or operation. Category-C facilities shall comply with subsection 62-762.211(2), F.A.C., on or after July 13, 1998.

Specific Authority 376.303 FS. Law Implemented 376.303, FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.210.*

62-762.301 Applicability.

(1) General Requirements:

(a) Aboveground storage tank systems: The requirements of this chapter, unless specified otherwise, apply to owners and operators of facilities, or owners and operators of aboveground stationary storage tank systems with individual storage tank capacities greater than 550 gallons, that contain or contained:

1. Vehicular fuel, subject to Chapter 17-61, F.A.C., after May 21, 1984;

2. Pollutants after March 12, 1991; or

3. Pollutants in unmaintained storage tank systems.

(b) Aboveground compression vessels and hazardous substance storage tank systems: Owners and operators of compression vessels and hazardous substance storage tanks with capacities of greater than 110 gallons containing hazardous substances are only required to comply with subsections 62-762.401(1)-(2), F.A.C.

(c) Aboveground mineral acid storage tank sytems: Owners and operators of facilities, or owners and operators of aboveground mineral acid storage tank systems with capacities of greater than 110 gallons containing mineral acids are only required to comply with Rule 62-762.891, F.A.C.

(d) This rule is applicable to non-residential facilities.

(2) Exemptions: The following aboveground systems are exempt from the requirements of this chapter:

(a) Any storage tank system storing any hazardous waste listed or identified under Subtitle C of the Resource Conservation and Recovery Act, or a mixture of such hazardous waste and other regulated substances;

(b) Any storage tank system regulated under the Toxic Substances Control Act (15 U.S.C. 2065);

(c) Any pesticide waste degradation system regulated under Chapter 62-660, F.A.C.;

(d) Storage tank systems used solely for temporary storage of mixtures of pesticides and dilutent for reapplication as pesticides;

(e) Any storage tank system with a storage capacity of less than 30,000 gallons used for the sole purpose of storing heating oil for consumptive use on the premises where stored;

(f) Any tank that contains asphalt or asphalt products not containing other regulated substances;

(g) Any storage tank system storing regulated substances that are solid or gaseous at standard temperature and pressure;

(h) Any storage tank containing LP gas;

(i) Any storage tank system that contains small quantities (de minimus, as per 40 C.F.R. Section 280.10(b)(5)) of regulated substances;

(j) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;

(k) Any septic tank system;

(l) Any stormwater or wastewater collection system;

(m) Any surface impoundment, pit, pond, or lagoon;

(n) Any agricultural storage tank system of 550 gallons capacity or less;

(o) Any residential storage tank system;

(p) Any emergency spill or emergency overflow containment storage tank system that is emptied as soon as possible after use, and that routinely remains empty;

(q) Any flow-through process tank system. For industrial and manufacturing facilities, integral piping is considered to terminate at the forwarding pump or valve used to transfer regulated substances to process, production, or manufacturing points of use or systems within the facility;

(r) Any storage tank system, liquid trap, or associated gathering lines directly related to oil or gas production and gathering operations regulated by Chapter 377, F.S.;

(s) Equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift or fluid tank systems and electrical equipment tank systems;

(t) Any pipeline facilities;

(u) Any storage tank system containing radionuclides or that is part of an emergency generator system for nuclear power generation at facilities regulated by the Nuclear Regulatory Commission under 10 C.F.R. Part 50 Appendix A;

(v) Vapor recovery holding tanks and associated vapor recovery piping systems; or

(w) Any rail or tanker truck loading or unloading operations (loading racks) specified in Chapter 5 of NFPA 30;

(x) Drip irrigation systems that:

1. Are not in contact with the soil;

2. Are constructed of corrosion resistant materials;

3. Are compatible with the products stored;

4. Contain less than 80% concentration of fertilizer materials by volume; and

5. Are applied on site.

(y) Systems used exclusively for the storage of aqueous solutions of sodium hypochlorite;

(z) Any mobile tank;

(aa) Any system located entirely within an industrial occupancy building;

(bb) Any storage tank system located entirely within an enclosed building or vault with an adequate roof and walls to prevent rainwater from reaching the system, and with an impervious floor containing no valves, drains, or other openings that would permit pollutants to be discharged from the system that were constructed before July 13, 1998; or

(cc) Any mobile double-wall tank, regardless of how long it is located at a facility, that is connected with a power module system that is used for the emergency or supplemental generation of electrical power by an electric utility as defined in Chapter 366, F.S. This exemption is limited to tanks that are designed and constructed to be moved to other service locations, and the relocation within a facility or from site to site is inherent in its use.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.300.*

62-762.401 Registration and Financial Responsibility.

(1) General registration requirements.

(a) The owner or operator of any facility, or the owner or operator of a storage tank system, aboveground hazardous substance tank, or compression vessel, shall register the storage tank system, aboveground hazardous substance tank, or compression vessel with the Department on Form 62-761.900(2).

(b) A completed registration form shall be submitted to the Department no later than 30 days after regulated or hazardous substances are put into any new storage tank system, above ground hazardous substance tank, or compression vessel.

(2) Registration fees.

(a) General requirements.

1. Registration fees are due from the tank or facility owner or operator, as indicated in this section, for all registered storage tank systems and compression vessels, except for:

a. Storage tank systems that have been properly closed in accordance with subsection 62-762.801(3), F.A.C.; and

b. ASTs at federally-owned or operated facilities.

2. A registration fee of $50.00 per tank or vessel shall be submitted for each initial registration of a storage tank system or compression vessel. The fee shall be paid within 30 days after receipt of an invoice by the Department.

3. A renewal fee of $25.00 per tank shall be paid to the Department for each storage tank system not meeting the closure requirements of subsection 62-762.801(3), F.A.C., by July 1 each year.

4. A replacement fee of $25.00 per tank shall be paid to the Department for each tank that is replaced for the purpose of facility upgrading, within 30 days after receipt of an invoice by the Department.

5. A late fee of $20.00 per tank shall be paid to the Department for any renewal that is received after July 31.

6. Each facility shall receive a registration placard upon payment of all applicable fees. The placard shall be displayed in plain view in the office, kiosk, or at another suitable location at the facility where the tank is located.

(b) Specific requirements.

1. Bulk product facilities. Owners or operators shall submit:

a. An annual renewal fee of $25.00 for each tank with a capacity of 250,000 gallons or less by July 1 of each year; and

b. An annual renewal fee of one dollar per every 10,000 gallons of storage capacity, for each tank with a storage capacity greater than 250,000 gallons, by July 1 of each year, not to exceed $1,000.00 per tank.

c. In no circumstances will the owner or operator of any facility pay an annual fee greater than $5,000 for all pollutant storage tanks located at the facility.

2. Compression vessels and aboveground hazardous substance storage tanks.

a. Owners and operators shall submit a renewal fee of $25.00 per tank or vessel to the Department by July 1 each year.

b. In no circumstance will the owner or operator of any facility pay an annual fee greater than $2500.00 for all registered compression vessels and aboveground hazardous substance storage tanks located at the facility.

(3) Financial responsibility.

(a) General requirements.

1. The owner or operator of a facility, or individual tanks, if of different ownership, shall demonstrate financial responsibility to the Department. If the owner and operator of a tank are separate persons, only one person is required to demonstrate financial responsibility. However, both persons are liable in event of noncompliance. Financial responsibility is only required for tanks containing petroleum or petroleum products. Financial responsibility is the ability to pay for corrective action and third-party liability resulting from a discharge at the facility.

2. The demonstration of financial responsibility shall be made by the owner or operator in accordance with C.F.R. Title 40, Part 280, Subpart H. Owners or operators shall substitute “aboveground” or “aboveground and underground” for “underground,” where applicable, for any documents required in C.F.R. Title 40, Part 280, Subpart H, that are submitted to the Department to demonstrate financial responsibility.

3. Financial responsibility requirements for petroleum storage systems containing petroleum products may be supplemented by participation in the Florida Petroleum Liability Restoration and Insurance Program to the extent provided by Section 376.3072, F.S.

4. Notwithstanding the owner’s or operator’s financial responsibility status, the owner or operator may, in accordance with Chapter 376 or 403, F.S., be liable for any discharge at the facility.

(b) Aboveground storage tank systems. The minimum requirements for financial responsibility for ASTs containing petroleum or petroleum products became effective on January 1, 1995, and are the same as provided by C.F.R. Title 40, Part 280, Subpart H, except for the following:

1. For a storage tank system with a capacity greater than 550 gallons and less than or equal to 10,000 gallons, the demonstration of financial responsibility for corrective action and third-party liability shall be a minimum of $500,000.00 per incident and $1 million annual aggregate.

2. For a storage tank system with a capacity greater than 10,000 gallons and less than or equal to 30,000 gallons, the demonstration of financial responsibility for corrective action and third-party liability shall be a minimum of $1 million per incident and $1 million annual aggregate.

3. For a storage tank system with a capacity greater than 30,000 gallons and less than or equal to 250,000 gallons the demonstration of financial responsibility for corrective action and third-party liability shall be a minimum of $1 million per incident and $2 million annual aggregate.

4. For a storage tank system with a capacity greater than 250,000 gallons, the demonstration of financial responsibility for corrective action and third-party liability shall be a minimum of $3 million per incident and $6 million annual aggregate.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.400.*

62-762.451 Notification and Reporting.

(1) Notification requirements.

(a) Verbal or written notice shall be provided to the County:

1. At least 30 days before installation or upgrading to meet the requirements of Rule 62-762.501, F.A.C., unless the County agrees to a shorter time period;

2. At least 10 days before an internal inspection of a UST, an API 653 internal inspection, a change in service status, closure, or closure assessment, any of which is performed to meet the requirements of this chapter;

3. At least 48 hours before:

a. Initiating activities specified in subparagraphs 1. or 2. above, to confirm the date and time of the scheduled activities;

b. The establishment of temporary out-of-service status for field-erected ASTs; and

c. Performing any tightness test required under this chapter.

4. Before the close of the County's next business day for an emergency change to an out-of-service status made as required by Rule 62-762.821, F.A.C. Verbal or written notification of the activities specified in subparagraphs 1. or 2. above performed as a direct result of the emergency change in service shall be made to the County before initiating the activities.

(b) Within 30 days after completion, the owner or operator shall notify the Department of the following items on Storage Tank Registration Form 62-761.900(2):

1. Any change in ownership of a facility or of a storage tank system. Notice of change of ownership shall be provided to the Department by the new owner. The notice shall include a copy of the bill of sale or a letter of acceptance by the new owner;

2. Closure or upgrading of a storage tank system;

3. Any change or correction in the information reported in the registration form, including changes in the type of regulated substances stored. A change within the same blend of regulated substances should not be reported (e.g., regular unleaded to premium unleaded gasoline); and

4. The establishment of, or changes to, the method of demonstrating financial responsibility required by subsection 62-762.401(3), F.A.C.

(2) Incident notification requirements.

(a) Notification of the discovery of the following incidents shall be made to the County on Incident Notification Form 62-761.900(6) within 24 hours or before the close of the County's next business day:

1. A failed or inconclusive tightness, pressure, or breach of integrity test;

2. Internal inspection results, including perforations, corrosion holes, weld failures, or other similar defects, that indicate that a release could have occurred;

3. Unusual operating conditions, such as the erratic behavior of product dispensing equipment, the sudden loss of product from a storage tank system, or any unexplained presence of water in a tank or unexplained presence of water with or without sheen in a piping sump, unless system equipment is found to be defective but not leaking;

4. The presence of odors of a regulated substance from surface water or groundwater, soil, basements, sewers and utility lines at a facility or in the surrounding area from which it could be reasonably concluded that a release or discharge may have occurred;

5. The loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces, other than secondary containment, such as driveways, airport runways, or other similar asphalt or concrete surfaces, provided that the loss does not come in contact with pervious surfaces;

6. The loss of a regulated substance exceeding 500 gallons inside a dike field area with secondary containment;

7. A positive response of release detection devices or methods described in Rule 62-762.641, F.A.C., or approved under subsection 62-762.851(2), F.A.C. A positive response shall be the indication of a release of regulated substances, an exceedance of the Release Detection Response Level, or a breach of integrity of a storage tank system; and

8. The presence of free product in a piping sump.

(b) Incident Notification Form 62-761.900(6) need not be submitted if:

1. Within 24 hours of discovery of an incident, or before the close of the County's next business day, the investigation of the incident confirms that a discharge did not occur; or

2. An Incident Notification Form was previously submitted for that incident.

(3) Discharge reporting requirements.

(a) Upon discovery of an unreported discharge, the owner or operator shall report the following to the County on Discharge Report Form 62-761.900(1) within 24 hours or before the close of the County's next business day:

1. Results, or receipt of results, of analytical or field tests of surface water or groundwater indicating the presence of contamination by:

a. A hazardous substance from a UST system;

b. A regulated substance, other than petroleum products; or

c. Petroleum products' chemicals of concern specified in Table V or VII, as applicable, in Chapter 62-770, F.A.C.;

2. Free product or sheen of a regulated substance, or a regulated substance that is visibly observed in soil, on surface water, in groundwater samples, on basement floors, in subsurface utility conduits or vaults, or in sewer lines at the facility or in the surrounding areas;

3. A spill or overfill event of a regulated substance to soil or another pervious surface, equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in C.F.R. Title 40, Part 302;

4. Results of analytical or field tests of soil indicating the presence of contamination by:

a. A hazardous substance from a UST system;

b. A regulated substance, other than petroleum products;

c. Petroleum products' chemicals of concern that exceed the lower of direct exposure I and leachability Table V cleanup target levels specified in Table IV in Chapter 62-770, F.A.C., unless due to a spill or overfill event in a quantity less than that described in subparagraph 3. above; or

5. Soils stained by regulated substances that are observed during a closure assessment performed in accordance with subsection 62-762.801(4), F.A.C.

(b) Copies of analytical or field test results that confirm a discharge shall be submitted to the County with Discharge Report Form 62-761.900(1).

(c) A request for a retraction of a submitted Discharge Report Form may be submitted to the County or the Department if evidence is presented that a discharge did not occur at the facility.

(d) A Discharge Report Form 62-761.900(1) does not need to be submitted for previously reported discharges.

Specific Authority 376.303, 376.309 FS. Law Implemented 376.303, 376.309 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.450.*

62-762.501 Performance Standards for Category C Storage Tank Systems.

(1) General performance standards. AST Category-C systems shall be constructed and installed in accordance with the requirements of this section. AST Category-C systems shall be made of, or internally lined with, materials that are compatible with the regulated substance stored in the system. The following requirements are applicable to AST systems:

(a) Siting. Persons are advised that, pursuant to paragraphs 62-521.400(1)(l)-(n) and subsection (2), F.A.C., no storage tank shall be installed within 500 feet of any existing community water supply system or any existing non-transient non-community water supply system. No Category-C system shall be installed within 100 feet of any other existing potable water supply well. These prohibitions shall not apply to the replacement of an existing storage tank system within the same excavation or dike field area, or the addition of new storage systems meeting the standards for Category-C systems at an existing facility.

(b) Exterior coatings. Exterior portions of aboveground tanks and aboveground integral piping, excluding double-walled systems, shall be coated or otherwise protected from external corrosion. The coating shall be designed and applied to resist corrosion, deterioration, and degradation of the exterior wall. SSPC-PA 1, Paint Application Specification No. 1 may be used to protect storage tank systems from external corrosion.

(c) Spill containment. USTs and shop-fabricated ASTs shall be installed with a spill containment system at each tank fill connection. The spill containment system shall be a fixed component that is designed to prevent a discharge of regulated substances when the transfer hose or pipe is detached from the tank fill pipe. The spill containment system shall meet the requirements of paragraph 62-762.501(1)(e), F.A.C.

(d) Dispensing systems.

1. The dispensing system used for transferring fuels from storage tanks shall be installed and maintained in accordance with the provisions of NFPA 30 and Chapters 2, 4 and 9 of NFPA 30A.

2. Dispensers shall be designed, constructed, and maintained to provide access for examination and removal of collected product and accumulated water from dispenser liners.

(e) Secondary containment.

1. The materials used for secondary containment shall be:

a. Impervious to the regulated substance and able to withstand deterioration from external environmental conditions;

b. Non-corrosive or of corrosion-protected materials;

c. Capable of containing regulated substances for at least 30 days; and

d. Of sufficient thickness and strength to withstand hydrostatic forces at maximum capacity to prevent a discharge during its operating life.

2. Liners, unless previously approved by the Department, shall be approved by the Department in accordance with subsection 62-762.851(2), F.A.C. Liners shall not be constructed or consist of naturally occurring in-situ soils.

3. Secondary containment constructed of concrete shall be:

a. Designed and constructed in accordance with ACI 350R-89 and ACI 224R-89; or

b. Lined on the visible interior surfaces of the dike field area in accordance with NACE International Standard RP 0892-92, or SSPC Publication 97-04, Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment; or

c. Designed, evaluated, and certified by a professional engineer registered in the State of Florida that the concrete secondary containment system meets the General Construction Requirements specified in subparagraph 62-762.501(1)(e)1., F.A.C.

4. For cathodically protected tanks and integral piping, secondary containment systems shall not interfere with the operation of the cathodic protection system.

5. Storage tank system equipment with closed interstitial spaces, such as double-bottomed ASTs and double-walled integral piping in contact with the soil that is connected to ASTs, shall be designed, constructed and installed to allow for the detection of a breach of integrity in the inner or outer wall by the monitoring of the interstitial space in accordance with paragraph 62-762.641(3)(a), F.A.C. A breach of integrity test shall be performed before the storage tank system is put into service.

6. Secondary containment systems shall be designed and installed to direct any release to a monitoring point or points.

7. Airport and seaport hydrant pits. Underground hydrant pits shall be installed with a spill catchment basin, secondary containment, or other spill prevention equipment to prevent the discharge of pollutants during fueling of aircraft, vessels, or at any other time the hydrant system is in use. Any such equipment shall be sealed to and around the hydrant piping with an impervious, compatible material.

8. Field-fabricated dispenser liners and piping sumps installed before July 13, 1998 do not have to be approved in accordance with Rule 62-762.851, F.A.C.

(f) Cathodic protection.

1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with at least one test station or method of monitoring to allow for a determination of current operating status. Cathodic protection test stations shall provide direct access to the soil electrolyte in close proximity to each cathodically protected structure for placement of reference electrodes, and monitoring wires that connect directly to cathodically protected structures. Facilities where direct access to soil in close proximity to cathodically protected structures is present, and where electrical connections to cathodically protected structures can be conveniently accomplished, need not have separate dedicated cathodic protection test stations.

2. The cathodic protection system shall be operated and maintained in accordance with paragraph 62-762.701(1)(b), F.A.C.

3. Any field-installed cathodic protection system shall be designed by a Corrosion Professional.

(g) Relocation of ASTs. Tanks that have been removed and that are to be reinstalled at a different location shall:

1. For field-erected tanks, comply with API Standard 653; or

2. For shop-fabricated tanks, be reinstalled in accordance with manufacturer's specifications, if applicable, and with the standards in Rule 62-762.501, F.A.C., that were in effect on July 13, 1998.

(h) Reuse of storage tanks. Unless it is recertified for use by a professional engineer registered in the State of Florida, or is recertified by the manufacturer, and is brought into service in accordance with Rule 62-762.501, F.A.C.:

1. A UST can not be used or reused as an AST for the storage of regulated substances; and

2. An AST can not be used or reused as a UST for the storage of regulated substances.

(2) Aboveground storage tank systems.

(a) Installation.

1. All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.

2. Storage tank systems shall be installed according to the applicable provisions of NFPA 30, NFPA 30A and PEI/RP200-96.

(b) Tank construction standards.

1. Shop-fabricated tanks shall be constructed in accordance with one of the following:

a. UL 142;

b. API Standard 620;

c. API Specification 12B;

d. API Specification 12F;

e. API Specification 12P;

f. STI F911-93;

g. STI F921®;

h. ASME B96.1; or

i. UL 2085.

2. Field-erected tanks shall be constructed in accordance with one of the following:

a. ASME B96.1;

b. API Standard 620;

c. API Standard 650;

d. API Specification 12B; or

e. API Specification 12D.

3. Field-erected tanks shall have an inspection and testing frequency established in accordance with API Standard 653 and maintained for the life of the tank.

4. Steel tanks in contact with soil shall have a cathodic protection system meeting the following requirements:

a. The cathodic protection system shall be designed, constructed, and installed in accordance wtih API RP 651 and NACE International Standard RP-0193-93;

b. A field-installed cathodic protection system shall be designed by a Corrosion Professional;

c. The cathodic protection system shall be designed and installed with at least one test station in accordance with subparagraph 62-762.501(1)(f)1., F.A.C., or a method of monitoring to allow for a determination of current operating status; and

d. The cathodic protection system shall be operated and maintained in accordance with paragraph 62-762.701(1)(b), F.A.C.

5. Tanks constructed of any other material, design, or corrosion protection shall be approved by the Department in accordance with subsection 62-762.851(2), F.A.C.

(c) Secondary containment.

1. All tanks installed or constructed at a facility after July 13, 1998 shall have secondary containment beneath the tank and within the dike field area, except for the following:

a. Tanks containing high viscosity regulated substances are exempt from the requirements for secondary containment. However, used or waste oil tanks, regardless of viscosity, shall have secondary containment beneath the tank and within the dike field area.

b. Double-walled shop-fabricated tanks approved in accordance with subsection 62-762.851(2), F.A.C., do not have to be installed in a dike field area.

c. Shop-fabricated tanks containing petroleum contact water pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, elevated above and not in contact with the soil, and that have an impervious surface directly beneath the area of the tank.

d. Field-erected tanks used for the temporary storage of petroleum contact water pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, and that have passed an internal inspection for structural integrity in accordance with API Standard 653.

e. AST Category-C field-erected tanks constructed within a dike field area with AST Category-A field-erected tanks shall have secondary containment beneath the tank, but shall not be required to have secondary containment within the dike field area until December 31, 1999.

2. Release prevention barriers such as double-bottoms, liners, or other undertank secondary containment systems for field-erected tanks shall be designed and constructed in accordance with API Standard 650.

3. Dike field areas with secondary containment shall:

a. Conform to the requirements of NFPA 30, Chapter 2-3;

b. Contain a minimum of 110% of the maximum capacity of the tank or of the largest single-walled tank within the dike field area. Capacity calculations shall include the volume occupied above the area of the "footprint" of the tank bottom or the largest tank within the dike field area;

c. If not roofed or otherwise protected from the accumulation of rainfall, be constructed with a manually controlled pump or siphon, or a gravity drain pipe which has a manually controlled valve to remove accumulated liquids. Gravity drain pipes shall be designed and constructed to prevent a discharge in the event of fire;

d. Have all integral piping and other penetrations that pass through the secondary containment of dike field areas sealed around the outside of the penetration with an impervious compatible material to prevent the discharge of pollutants; and

e. If constructed of steel, be tested in accordance with UL 142.

(d) Overfill protection.

1. No transfer of regulated substances shall be made unless the volume available in the tank is greater than the volume of regulated substances to be transferred. The transfer shall be repeatedly monitored to prevent overfilling.

2. Overfill protection shall be performed in accordance with API RP 2350.

3. At a minimum, fillbox covers shall be marked in accordance with API RP 1637, or an equivalent method approved by the Department in accordance with subsection 62-762.851(2), F.A.C.

4. All tanks shall be equipped with at least one of the following:

a. A gauge or other measuring device that accurately shows the level of pollutant in the tank and that is visible to the person who is monitoring the filling;

b. A high level warning alarm;

c. A high level liquid flow cutoff controller;

d. An impervious dike field area; or

e. Another device approved in accordance wtih subsection 62-762.851(2), F.A.C.

5. Calibrated stick measurements of the level of pollutants in the tank shall only be used for tanks with a capacity of 15,000 gallons or less that are not loaded with high-volume pressurized nozzles. Such tanks shall not be loaded beyond 95% capacity.

(e) Dispenser liners.

1. Dispensers connected to AST systems that are installed or replaced after July 13, 1998 shall be installed with liners meeting the performance standards of paragraph 62-762.501(1)(e), F.A.C., beneath the union of the piping and the dispenser. Dispensers mounted directly upon a tank are exempt from this requirement.

2. Hydrostatic tests shall be performed for all dispenser liners before placing the system into service. The duration of the tests shall be at least:

a. Twenty-four hours for field-fabricated dispenser liners; or

b. Three hours for factory-made dispenser liners.

3. Dispenser liners shall be installed to allow for interstitial monitoring in accordance with paragraph 62-762.641(3)(a), F.A.C.

(f) Piping sumps.

1. Piping sumps installed after July 13, 1998 shall meet the performance standards of paragraph 62-762.501(1)(e), F.A.C. The sumps shall be designed, constructed, and installed to minimize water entering the sump.

2. Hydrostatic tests shall be performed for all piping sumps before placing the system into service. The duration of the tests shall be at least:

a. Twenty-four hours for field-fabricated piping sumps; or

b. Three hours for factory-made piping sumps.

3. Piping sumps shall be installed to allow for interstitial monitoring in accordance with paragraph 62-762.641(3)(a), F.A.C.

(3) Integral piping for aboveground storage tank systems.

(a) Installation.

1. All integral piping shall be installed in accordance with the manufacturer's instructions, if applicable.

2. All integral piping shall be installed according to the applicable provisions of NFPA 30, NFPA 30A, and ASME B31.4.

3. A tightness test shall be performed on underground small diameter piping associated with ASTs before any new underground piping system is placed into service. A pressure test shall be performed for underground bulk product piping before the piping system is placed into service.

4. All piping that is not in contact with the soil, installed after July 13, 1998, shall meet the construction standards in paragraphs 62-762.501(3)(a)-(d), F.A.C.

(b) Integral piping construction standards.

1. Fiberglass reinforced plastic piping or other non-metallic piping installed at a facility shall be listed with UL 971, UL 567, certified by a Nationally Recognized Laboratory that these standards are met, or approved in accordance with subparagraph 62-762.501(3)(b)3., F.A.C.

2. Coated steel piping shall be constructed in accordance with ASME B31.4. Integral piping in contact with the soil shall be cathodically protected in accordance with API RP 1632, NACE International RP-0169-96, and STI R892-96.

3. Integral piping constructed of other materials, design, or corrosion protection shall be approved by the Department in accordance with subsection 62-762.851(2), F.A.C.

(c) Small diameter piping.

1. Pressurized small diameter piping systems connected to dispensers shall be installed with shear valves or emergency shutoff valves in accordance with NFPA 30A, Section 4-3.6, if applicable. These valves shall be designed to close automatically if a dispenser is dislodged from the integral piping. The valves shall be rigidly anchored independently of the dispenser.

2. Gravity-fed small diameter integral piping systems must be installed with an isolation valve at the point of connection to the storage tank to prevent the discharge of regulated substances in the case of piping failure. The valve shall meet the standards of NFPA 30A, Section 2-1.7.

3. Swing-joints shall not be installed.

(d) Bulk product piping. Bulk product piping shall be constructed and installed in accordance with NFPA 30, and ASME B31.4.

(e) Secondary containment.

1. Small diameter integral piping that is in contact with the soil or that transports regulated substances over surface waters of the state shall have secondary containment.

2. Bulk product piping that is in contact with the soil shall have secondary containment.

3. Remote fill piping that is in contact with the soil shall have secondary containment.

4. Integral piping that is in contact with the soil, and that is connected to storage tanks containing high viscosity regulated substances is exempt from the requirements for secondary containment.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.500.*

62-762.511 Performance Standards for Category-A and Category-B Storage Tank Systems.

(1) General. This section provides deadlines for Category-A and Category-B storage tank systems to meet the standards for Category-C storage tank systems in accordance with Rule 62-762.501, F.A.C.

(a) Installation:

1. Installation shall be completed by the deadlines specified in Table AST. However, if installation or upgrade activities are initiated before the deadlines, work can continue after the deadlines, provided that all work is completed within 90 days of:

a. Contract execution; or

b. Receipt of construction approval or permits.

2. Installation is considered to have begun if:

a. All federal, state, and local approvals or permits have been obtained or applied for to begin physical construction for installation of the system; or

b. Contractual obligations have been made for installation of the system which cannot be canceled or modified without substantial economic loss, provided that such obligations are pursued diligently in good faith to achieve the requirements of this rule.

(b) By December 31, 1998:

1. All pressurized small diameter piping systems connected to dispensers shall have shear valves or emergency shutoff valves installed in accordance with paragraph 62-762.501(3)(c), F.A.C.

2. Cathodic protection test stations shall be installed in accordance with subparagraph 62-762.501(1)(f)1., F.A.C., for cathodically protected AST systems without test stations.

3. ASTs that have been reinstalled as USTs shall meet the requirements of Rule 62-762.501, F.A.C.

(c) After July 13, 1998, a closure assessment shall be performed in accordance with subsection 62-762.801(4), F.A.C., before the installation of dispenser liners, piping sumps, or secondary containment of tanks and integral piping.

(d) Valves meeting the requirements of Section 2-1.7 of NFPA 30A, shall be installed by January 13, 1999 on any storage tank system located at an elevation that produces a gravity head on the dispenser or on small diameter piping.

(e) Small diameter piping transporting regulated substances over surface waters of the state shall have secondary containment by December 31, 2004.

(2) Aboveground storage tank systems.

(a) All storage tank systems with tanks having capacities greater than 550 gallons that contain vehicular fuel and that were subject to Chapter 17-61, F.A.C., shall have met the requirements of such chapter by January 1, 1990.

(b) AST Category-B tanks, with the exception of tanks exempt under sub-subparagraph 62-762.501(2)(c)1.a., F.A.C., installed or constructed at a facility after March 12, 1991, shall have secondary containment for the tank.

(c) Integral piping that is in contact with the soil and that is connected to AST systems shall have secondary containment if installed after March 12, 1991. For integral piping that is exempt under subparagraph 62-762.501(3)(e)4., F.A.C., it is not required to install secondary containment.

(d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with subsection 62-762.801(3), F.A.C.

TABLE AST

Year Tank or Integral Piping Installed	1993	2000	2005	2010
+Before July 13, 1998	P	TVX	W	U

Key to Table AST

P = With the exception of high viscosity bulk product piping, bulk product piping in contact with soil and not in secondary containment shall be tested in accordance with API RP 1110, ASME B31.4, or an equivalent method approved by the Department in accordance with Rule 62-762.851, F.A.C. Such testing shall be performed annually thereafter.

T =

(1) With the exception of siting and material construction standards, Category-A and Category-B systems shall meet the performance standards of Rule 62-762.501, F.A.C. In addition:

(a) Storage tank system construction standards that include cathodic protection remain applicable; and

(b) Storage tanks where the entire bottom of the tank is in contact with concrete do not have to seal the concrete beneath the tank until such time that the tank bottom is replaced. However, concrete secondary containment systems designed in accordance with sub-subparagraph 62-762.501(1)(e)3.a., F.A.C., do not have to be sealed.

(2) Category-A bulk product piping in contact with the soil shall be upgraded with secondary containment, unless:

(a) A structural evaluation is performed in accordance with API 570, as specified in "U" (2) (b), of Table AST, and results of the structural evaluation indicate that the bulk product piping has remaining useful life; or

(b) The integral piping conveys high viscosity regulated substances, that are exempt from secondary containment in accordance with subparagraph 62-762.501(3)(e)4., F.A.C.; or

(c) The integral piping is protected from corrosion and is tested annually in accordance with ASME B31.4, API 1110, or an equivalent method approved by the Department in accordance with Rule 62-762.851, F.A.C. This piping shall have secondary containment by January 1, 2010, in accordance with "U" of Table AST.

(3) Initial internal and external inspections, examinations, and tests for each tank shall be performed in accordance with API Standard 653, and an appropriate reinspection interval for each tank shall be established in accordance with API Standard 653. If any deficiency is discovered during the inspections, the person performing the evaluation of the tank in accordance with API 653 must verify that the tank is ready for service before the storage tank is put back into service. This verification must be documented in the internal inspection records. Future tests for each tank shall be performed in accordance with the inspection interval established in accordance with API 653 (1996). Baseline inspections already conducted according to the API Standard 653 (1991) will be accepted.

(4) As an alternative to installing secondary containment underneath an AST Category-A or Category-B storage tank, the interior bottom of the tank and at least 18 inches up the sides may be internally lined in accordance with API RP 652. Secondary containment must nonetheless be installed in the dike field area and be continuously bonded to the perimeter of the tank foundation.

U =

(1) All internally lined single bottom storage tanks, with the exception of tanks exempt under paragraph 62-762.501(4)(a), F.A.C., shall be upgraded with secondary containment.

(2) All AST Category-A bulk product piping in contact with the soil, except for piping exempt from secondary containment requirements under subparagraph 62-762.501(8)(e)4., F.A.C., shall be:

(a) Upgraded with secondary containment in accordance with paragraph 62-762.501(1)(e), F.A.C.; or

(b) Instead of being upgraded with secondary containment, be evaluated for structural integrity by:

1. Establishing and maintaining the piping inspection intervals in accordance with API 570, Section 4-2, by January 1, 2000;

2. Determining the remaining life of the system in accordance with API 570, Section 5.0, by January 1, 2000. If the determination indicates that the piping:

a. Must be repaired, then the piping shall be repaired within three months of the determination in accordance with API 570 and Rule

62-762.701, F.A.C.;
b. Is leaking, then the piping must be immediately taken out of operation. If the piping cannot be repaired, it must be closed or upgraded with secondary containment within one year of the determination;
c. Is not leaking, but has corroded to a point where it no longer has structural integrity, then the piping shall be closed, or upgraded with secondary containment by January 1, 2000; or
d. Has remaining useful life, then the piping shall be closed or upgraded with secondary containment when the API 570 inspection and remaining life determination data indicates that closure or replacement is necessary.
3. Providing a certification by a professional engineer registered in the State of Florida that the evaluation meets the above criteria.
V =
(1) Secondary containment for cut and cover or concrete storage tanks.
(2) Spill containment in accordance with paragraph 62-762.501(1)(c), F.A.C.
(3) Dispenser liners for shop-fabricated tanks in accordance with paragraph 62-762.501(2)(e), F.A.C.
(4) Secondary containment in accordance with paragraphs 62-762.501(1)(e) and (2)(c), F.A.C., for dike field areas of facilities with shop-fabricated tanks having dike field area secondary containment that is constructed of concrete or installed with synthetic liners not meeting these requirements.
W =
(1) Secondary containment in accordance with paragraphs 62-762.500(1)(e) and (3)(c), F.A.C., for dike field areas of facilities with field-erected tanks having dike field area secondary containment that is constructed of concrete or installed with synthetic liners not meeting these requirements.
(2) Secondary containment for small diameter piping extending over surface waters.
(3) Secondary containment for small diameter petroleum contact water piping in contact with the soil.
X = Deadline to determine integrity of single wall bulk product piping with an API 570 structural integrity evaluation in accordance with the option for Category-A systems in "U" of Table AST.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.510.*

62-762.601 Release Detection Standards.

(1) General.

(a) Storage tank systems shall have a method, or combination of methods, of release detection that:

1. Can detect a new release from any portion of the storage tank system;

2. Is installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability to ensure that the device is functioning as designed; and

3. Meets the applicable performance standards in Rule 62-762.641, F.A.C. All manufacturer's instructions, and the performance claims and their manner of determination described in writing by the equipment manufacturer or installer shall be retained for as long as the storage tank system is used.

(b) A release detection response level shall be described in writing for each method or combination of methods of release detection used for a storage tank system.

(c) A release detection method shall be established and provided for all storage tank systems upon installation.

(d) Except as otherwise specified in Rules 62-762.601-.641, F.A.C., the release detection method or combination of methods used at a facility shall be performed at least once a month, but not exceeding 35 days, to determine if a release from the storage tank system has occurred.

(e) At least once a month, but not exceeding 35 days, any storage tank and component of a storage tank that can be inspected visually shall be visually inspected in accordance with paragraph 62-762.641(2)(e), F.A.C. A visual inspection is not required for any system component that has a continuous or monthly electronic release detection sensor. Continuous electronic leak detection devices shall be inspected for proper operation on a monthly basis. Inspection may consist of visual observation or remote verification of proper operation.

(f) A site suitability determination shall be performed for UST systems by December 31, 1998, and January 1, 2000 for AST systems, in accordance with paragraphs 62-762.641(2)(a)-(d), F.A.C., for storage tank systems using groundwater or vapor monitoring wells for release detection. If the site suitability determination indicates that on-site conditions are unsuitable for

external monitoring, another method of release detection must be used.

(g) Vapor monitoring plans shall be performed by January 1, 2000, for AST systems, in accordance with paragraph 62-762.641(2)(d), F.A.C., for storage tank systems using vapor monitoring for release detection.

(h) Any component of a storage tank system with secondary containment shall have an interstitial monitoring method meeting the requirements of paragraph 62-762.641(3)(a), F.A.C.

(i) Pressurized piping, excluding bulk product piping, shall be equipped with a line leak detector that meets the standards of subparagraph 62-762.641(3)(c)1., F.A.C. Gravity piping systems are exempt from this requirement.

(j) Any storage tank system not provided with a method, or combination of methods, of release detection in accordance with this section, shall be closed in accordance with subsection 62-762.801(3), F.A.C., by the date upon which release detection is to be provided.

(k) Groundwater and vapor monitoring wells meeting the standards for external monitoring specified in paragraphs 62-762.641(2)(a)-(d), F.A.C., that are no longer used for release detection, shall be closed in accordance with subsection 62-532.500(4), F.A.C., by December 31, 2010. Wells not meeting these standards shall be closed in accordance with subsection 62-532.500(4), F.A.C., by December 31, 1998, unless the wells are:

1. Used for contamination assessment purposes as specified in Rule 62-770, F.A.C.; or

2. Required by rules adopted by a County government in accordance with Section 376.317, F.S.

(2) Aboveground storage tank systems.

(a) The following methods of release detection that were implemented before March 12, 1991, shall be capable of detecting the leak rate or quantity specified in paragraph 62-762.641(1)(a), F.A.C., by December 31, 1999:

1. Any groundwater monitoring plan that meets the requirements of Rule 62-528.700, F.A.C.; or

2. Any Spill Prevention Control and Countermeasure plan as required by 40 C.F.R. Section 112.

(b) All monitoring wells used for release detection shall meet the standards in subsection 62-762.641(2), F.A.C., by January 1, 2000, or be properly closed in accordance with subsection 62-532.500(4), F.A.C.

(c) Release detection for field-erected storage tanks with secondary containment beneath the tank shall comply with API Standard 650, Appendix I.

(d) Storage tanks upgraded with internal lining shall, by the completion of the installation of the internal lining, be provided with a method of release detection that meets the standards in subsection 62-762.641(2), F.A.C.

(e) AST integral piping in contact with the soil shall be provided with a method, or combination of methods, of release detection. Integral piping in contact with the soil having secondary containment shall have interstitial monitoring, and single-walled integral piping in contact with the soil shall have release detection meeting the requirements of subsection 62-762.611(3), F.A.C.

(f) Facilities using a Spill Prevention Control and Countermeasure plan as required by 40 C.F.R. Section 112, for release detection, or a groundwater monitoring plan meeting the requirements of Rule 62-528.700, F.A.C., for release detection, shall meet the release detection requirements of Rule 62-762.611, F.A.C., by December 31, 1999.

(g) ASTs containing high viscosity regulated substances are exempt from all release detection requirements except for visual inspections pursuant to paragraph 62-762.641(2)(e), F.A.C.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.600.*

62-762.611 Release Detection Methods.

(1) General.

(a) Category-A and Category-B systems. Release detection methods shall be one of the methods specified in this section, and shall meet the performance standards contained in Rule 62-762.641, F.A.C.

(b) Category-C systems. Release detection methods shall be either interstitial or visual monitoring of secondary containment in accordance with Rule 62-762.641, F.A.C. Small diameter pressurized piping shall have a line leak detector in accordance with subparagraph 62-762.641(3)(c)1., F.A.C. A breach of integrity test shall be performed every five years for Category-C storage tank systems with closed interstitial spaces, unless the test is a continuous test.

(2) Aboveground storage tank systems.

(a) Tanks. Category-A and Category-B ASTs shall be equipped with one or more of the following release detection systems:

1. Tanks with secondary containment shall have an interstitial monitoring system:

a. Between the walls of a double-walled tank;

b. In the interstice between the tank and any liner used for secondary containment;

c. Between the tank bottom and the secondary containment for double-bottomed tanks;

2. Tanks without secondary containment or that are exempt from secondary containment shall have a visual inspection performed in accordance with paragraph 62-762.611(3)(b), F.A.C.

3. Tanks with internal lining and cut and cover tanks shall have a method of release detection that meets the requirements of subsection 62-762.641(2), F.A.C.

(b) Visual inspections of tank systems. A visual inspection of the exterior of each tank, the aboveground integral piping system, the secondary containment within the dike field area (if applicable), the dike field area, and any other storage system components shall be conducted and documented at least once a month, but not exceeding 35 days.

(3) Integral piping.

(a) Small diameter piping in contact with the soil. Single-walled piping that is in contact with soil shall be equipped with one of the following release detection systems:

1. Suction or gravity piping shall have:

a. An annual line tightness test; or

b. An external monthly monitoring or release detection method meeting the requirements of subsection 62-762.641(2), F.A.C., if designed to detect a discharge from any portion of the integral piping.

2. By December 31, 1998, pressurized piping shall have:

a. Mechanical line leak detectors meeting the requirements of paragraph 62-762.641(3)(c), F.A.C., and either an annual line tightness test, or an external release detection method meeting the requirements of paragraph 62-762.641(3)(c), F.A.C.; or

b. Electronic line leak detectors meeting the requirements of paragraph 62-762.641(1)(a), F.A.C.

3. Exemptions. Release detection is not required for piping associated with:

a. Suction pumps, provided that a single check valve is installed directly below the suction pump, and the piping is sloped so that the contents of the pipe will drain back to the tank if the suction is broken; and

b. Manifold piping systems.

(b) Small diameter piping not in contact with the soil, or that is exempt from secondary containment. These systems shall be visually inspected in accordance with paragraph 62-762.611(2)(b), F.A.C.

(c) Small diameter piping with secondary containment that is in contact with the soil. Double-walled piping, or single-walled piping with secondary containment shall be equipped with the following release detection systems:

1. Interstitial monitoring; and

2. A method of testing for a breach of integrity that meets the requirements of subparagraph 62-762.641(3)(a)2., F.A.C., for Category-C systems, as applicable.

(d) Bulk product and hydrant piping.

1. Single-walled piping in contact with the soil:

a. Shall be pressure tested annually in accordance with paragraph 62-762.641(3)(d), F.A.C.; or

b. Instead of annual testing, a monthly release detection system meeting the requirements of subsection 62-762.641(2) F.A.C., may be installed.

2. Piping not in contact with the soil, or that is exempt from secondary containment, shall be visually inspected in accordance with paragraph 62-762.611(2)(b), F.A.C.

3. Piping with secondary containment that is in contact with the soil, such as double-walled piping or single-walled piping with secondary containment, shall be equipped with the following release detection systems:

a. Interstitial monitoring; and, if applicable,

b. For Category-C systems, a method of testing for a breach of integrity that meets the requirements of subparagraph 62-762.641(3)(a)2., F.A.C., for piping with closed interstitial spaces.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.610.*

62-762.641 Performance Standards for Release Detection Methods.

(1) General. Methods of release detection shall:

(a) Be capable of detecting a release of 0.2 gallons per hour or 150 gallons within 30 days with a probability of detection of 0.95, and a probability of false alarm of 0.05, with the exception of:

1. Tightness testing requirements in subparagraphs 62-762.641(3)(c)2. and (3)(d)1., F.A.C.;

2. Visual inspections in paragraph 62-762.641(2)(e), F.A.C.;

3. Groundwater or vapor monitoring in subsection 62-762.641(2), F.A.C.; and

4. Manual tank gauging in subparagraph 62-762.640(3)(c)1., F.A.C.

(b) With the exception of bailers and monitoring wells, be approved in accordance with subsection 62-762.851(2), F.A.C.

(c) Have a release detection response level described in writing for each method or combination of methods.

(2) External release detection methods.

(a) Well construction standards.

1. Monitoring well requirements. Monitoring wells shall be constructed and installed by a licensed water well contractor when required by Chapter 62-531, F.A.C. Monitoring wells shall:

a. Be a minimum of two inches in interior diameter;

b. Be slotted from the bottom to two feet below ground surface;

c. Have a minimum slot size of 0.010 inch;

d. Be backfilled with clean sand or a gravel filter pack to prevent blockage of the slots;

e. Be constructed of at least schedule 40 PVC without any joints, or of another corrosion protected material;

f. Be grouted into the borehole from the surface to the top of the filter pack plug with neat cement grout or other equivalent materials. Grouting shall not extend below the top of the well slotting. Bentonite slurry grouts shall not be used;

g. Unless the monitoring well has an extended exterior casing, be equipped with a minimum six inch diameter manhole designed to prevent water instrusion with a one inch minimum grade increase above the surrounding surface. The well opening shall extend at least one inch above the bottom of the manhole;

h. Be equipped with a watertight cap. The well shall be kept locked or secured to prevent tampering at all times except when the monitoring well is being sampled or maintained. Monitoring wells shall be marked in accordance with API RP 1615;

i. Extend no deeper than 20 feet below ground surface. If such a depth penetrates a confining layer below the excavation, the monitoring well shall extend no deeper than to within six inches of the confining layer. Any well that penetrates a confining layer shall immediately be properly abandoned in accordance with Rule 62-532.500, F.A.C.; and

j. If installed within a secondary containment liner system, extend no deeper than six inches from the liner.

2. Groundwater monitoring wells shall:

a. Extend at least five feet below the normal groundwater surface level; and

b. Be properly developed by the licensed water well contractor before the initial sampling.

3. Vapor monitoring wells shall meet the requirements specified in DEP's "Guidelines for Vapor Monitoring."

4. Electronic sensors, probes, or fiber-optic systems shall be tested at least annually to verify that they operate in accordance with the Department's approval given pursuant to subsection 62-762.851(2), F.A.C.

5. Groundwater and vapor monitoring wells using the placement of sensors or probes in vertical, horizontal, or directionally-drilled wells shall be designed and installed in accordance with the equipment approval for that system granted in subsection 62-762.851(2), F.A.C.

(b) Site suitability determinations.

1. A site suitability determination shall be performed for each facility using groundwater or vapor monitoring. The site suitability determination shall be performed in accordance with DEP's "Guidelines for Site Suitability Determinations for External Monitoring" by a Professional Geologist registered in the State of Florida. If the site is not suitable for external monitoring, another method of release detection must be used.

2. The following facilities having Category-A and Category-B ASTs that use external monitoring are not required to perform site suitability determinations:

a. Facilities located in counties having rules more stringent than the Department as specified in Chapter 376.317, F.S.

b. Facilities with monitoring wells located in the tank excavation, provided that a demonstration can be made that the excavation contains sand or gravel backfill, and the wells were properly constructed and installed within the backfill.

(c) Groundwater monitoring.

1. The regulated substance shall be immiscible in water and have a specific gravity of less than one.

2. Groundwater monitoring shall not be used for release detection after free product or a sheen is discovered in a monitoring well, unless:

a. A Site Rehabilitation Completion Order has been issued by the Department following the remediation of the free product or sheen, and there is no longer any free product in the monitoring well; or

b. Free product or sheen is not present and has not been observed in the well within the previous thirty (30) months, as demonstrated by records of at least six (6) monthly ground water monitoring sampling events, and within the previous two years, the system has been tested tight with tank and line piping tests or another internal method of release detection performed in accordance with subsection 62-762.641(3), F.A.C.

3. Another method of release detection specified in Rule 62-762.611, F.A.C., other than groundwater monitoring, shall be used when:

a. There is less than one foot of groundwater present in the well; or

b. The groundwater level is above the slotted portion of the well.

4. Records. The following information shall be maintained in accordance with the recordkeeping requirements of this chapter:

a. Date of sampling;

b. Depth of well;

c. Depth to groundwater;

d. Any presence of odor of stored regulated substances; and

e. Any sheen or free product found.

(d) Vapor monitoring.

1. Vapor monitoring can only be used to monitor regulated substances that are sufficiently volatile to be detected in soils or groundwater by vapor monitoring equipment.

2. The measurement of vapors in a vapor monitoring well shall not be rendered inoperative by groundwater, rainfall, soil moisture or other known interferences so that a discharge could go undetected for more than 30 days.

3. Sampling equipment shall be capable of detecting:

a. A vapor concentration of 500 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing gasoline or equivalent petroleum substances;

b. A vapor concentration of 50 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing kerosene, diesel or equivalent petroleum substances;

c. Vapor concentrations of hazardous substances or their constituents that would indicate a release; or

d. Vapor concentrations of tracer compounds used for release detection.

4. Vapor monitoring shall not be used for release detection if existing contamination interferes with the ability to detect a new release.

5. The vapor monitoring plan shall be developed and performed in accordance with DEP's "Guidelines for Vapor Monitoring." The plan shall include a description of monitoring wells or probes, the method of sampling, the establishment of a release detection response level and the data management procedures. Facilities with monitoring wells located in the tank excavation do not have to meet the requirements for DEP's "Guidelines for Site-Suitability Determinations for External Monitoring," provided that a demonstration can be made that the excavation contains sand or gravel backfill, and the wells were properly constructed and installed within the backfill.

(e) Visual inspections. Any visual inspection of the storage tank system or its secondary containment that reveals signs of corrosion, cracks, structural damage, leakage, or other similar problems shall be noted. Repairs shall be made in accordance with the requirements of Rule 62-762.701, F.A.C.

(3) Internal release detection methods.

(a) Interstitial monitoring for AST systems.

1. Interstitial monitoring for double-walled tanks, double-walled integral piping, dispenser liners, piping sumps, and other secondary containment systems, shall be designed and constructed to allow monitoring of the space between the primary and secondary containment. One or more of the following methods of interstitial monitoring shall be used:

a. Manual sampling of, or visual monitoring for, liquids;

b. Continuous electronic sensing equipment;

c. Hydrostatic monitoring systems; or

d. Vacuum monitoring.

2. Breach of integrity tests for Category-C systems. A test shall be performed for a breach of integrity of the interstice for double-walled USTs, double-bottomed ASTs, and for double-walled integral piping that is in contact with the soil and that is connected to ASTs or USTs. Double-walled shop-fabricated ASTs, piping sumps, and dispenser liners are not required to perform a breach of integrity test. The test shall be performed to determine the integrity of the inner and outer wall, is required only for tanks and integral piping with closed interstices, and does not apply to open-interstice systems with liners. The test shall be performed at the time of installation, and every five years from the date of installation, unless the test is a continuous test. If a UST is totally submerged in groundwater, monthly monitoring of the interstice for the presence of water shall be conducted. The breach of integrity test may be performed by using at least one of the following methods:

a. A continuous hydrostatic system approved by the Department in accordance with subsection 62-762.851(2), F.A.C.;

b. A continuous vacuum system, pursuant to paragraph 62-762.641(3)(a), F.A.C., that is approved by the Department in accordance with subsection 62-762.851(2), F.A.C.;

c. Testing of the interstice for liquid tightness in accordance with manufacturer's installation instructions; or

d. Another method in accordance with subsection 62-762.851(2), F.A.C.

3. Vacuum monitoring of the interstice shall meet the following requirements:

a. Liquid-filled gauges and air-filled gauges shall be calibrated in accordance with the National Institute of Standards and Technology. The gauges shall be operational at all times.

b. Vacuum monitoring may be used as a continuous method of release detection provided that the vacuum system is equipped with an audible or visual alarm. The alarm shall indicate when the minimum vacuum level allowed is reached as provided in the equipment approval granted in accordance subsection 62-762.851(2), F.A.C.

c. Vacuum readings shall be recorded monthly. Upon discovery of any significant vacuum level decrease, or any loss of vacuum exceeding 20% of the initial level, or any loss in excess of the levels established in the test protocols provided in the third party certification for the test method, the tank manufacturer shall be contacted and the vacuum refreshed in accordance with the storage tank system's equipment approval in subsection 62-762.851(2), F.A.C. If the loss of vacuum persists, an investigation shall be initiated and an incident reported in accordance with subsection 62-762.451(2), F.A.C. The source of the loss shall be repaired in accordance with Rule 62-762.701, F.A.C.

4. Interstitial monitoring for storage tanks and integral piping equipped with liners shall be designed and constructed to allow monitoring of the space between the primary and secondary containment and shall:

a. Be capable of detecting a release through the inner wall into the interstice;

b. Be constructed and installed so that groundwater, rainfall, or soil moisture will not render the testing or sampling method used inoperative; and

c. Be equipped with an external release detection method meeting the standards of paragraphs 62-762.641(2)(a)-(d), F.A.C., except for the groundwater level and excavation zone assessment requirements; or

d. Be visually inspected in accordance with paragraph 62-762.641(2)(e), F.A.C.; or

e. Be equipped with a monitoring device approved in accordance with subsection 62-762.851(2), F.A.C., installed at the monitoring point within the liner.

(b) Inventory control.

1. General.

a. Inventory control shall be maintained for each single-walled tank that contains vehicular fuel.

b. Storage tank systems that are elevated above the soil or that have secondary containment are exempt from inventory control requirements. ASTs that rest on an impervious surface are also exempt.

2. Inventory control for shop-fabricated ASTs shall be performed and recorded in accordance with API RP 1621, as applicable. Manifolded tanks may be treated as a single tank for the purposes of inventory control. Inventory control shall be performed in the following manner:

a. Volume measurements for product inputs, withdrawals, and the amount remaining in each tank shall be recorded each operating day;

b. Measurements of product levels shall be recorded to the nearest one-eighth of an inch;

c. Product inputs shall be reconciled with delivery receipts by measurement of the tank product volume before and after delivery;

d. Product dispensed shall be metered as required by Chapters 525 and 531, F.S., and in accordance with the standards

established by the Florida Department of Agriculture and Consumer Services in Chapter 5F-2, F.A.C.;

e. The measurement of water level in the bottom of the tank shall be made at least once a week to the nearest one-eighth of an inch; and

f. The significant loss or gain of product shall be calculated for each month.

3. Inventory control requirements for field-erected ASTs.

a. Bulk product facilities may use product inventory control for multiple tanks provided that a demonstration of equivalent protection is made in accordance with subsection 62-762.851(1), F.A.C.

b. Inventory measurements for field-erected systems, manifolded systems, and non-manifolded systems with a capacity of 30,000 gallons or greater shall be reconciled to detect the presence of a significant loss or gain. The equipment and method used shall be capable of accurately measuring the level or volume of product over the full range of the tank's usable storage capacity, to the nearest one fourth of an inch.

4. Investigation procedures for significant loss or gain. An investigation shall be initiated immediately to determine the source of a significant loss or gain. The entire storage tank system, excluding the vent, but including piping connections and remote fill lines, shall be tested or inspected to determine if the system is product tight. The investigation shall continue until the source has been found, using the following investigative procedure:

a. Inventory records shall be checked for errors in arithmetic, data recording, and measurement;

b. If the significant loss or gain is not reconcilable or cannot be affirmatively demonstrated to be the result of theft, the accessible parts of the storage system shall be checked for damage or leaks;

c. Release detection systems shall be checked for signs of a discharge;

d. Calibration of the inventory measuring system and dispensing system shall be verified;

e. If the investigation does not reveal the source of the significant loss or gain within one week for USTs, and two weeks for ASTs, or if the Department or County determines that it is necessary to investigate based on evidence that the significant loss or gain could result in potential harm to the environment, the storage tank system shall be tested in accordance with the manufacturer's guidelines, if applicable, and subsection 62-762.641(3), F.A.C.; and

f. If a discharge is discovered, the leaking or defective component of the storage tank system shall be repaired in accordance with Rule 62-762.701, F.A.C. If the storage tank system cannot be repaired, it shall be closed in accordance wtih subsection 62-762.801(3), F.A.C.

(c) Small diameter integral piping in contact with the soil.

1. Line leak detectors for USTs. Line leak detectors shall:

a. Be capable of detecting a discharge of 3.0 gph with a probability of detection of 0.95 and a probability of false alarm of 0.05 at a line pressure of 10 psi within one hour;

b. Have an annual test of the operation of the leak detector conducted in accordance with the manufacturer's requirements by an individual certified or trained by the manufacturer to determine whether the device is functioning as designed. Remote testing of the leak detector can be performed by the manufacturer if the remote test is approved under subsection 62-762.851(2), F.A.C.;

c. Restrict flow within one hour if designed with mechanical flow restriction;

d. When a discharge of 3.0 gph is detected, shut off power to the pump if designed with automatic electronic shutoff. When in test mode, line leak detectors with automatic electronic shutoff shall also be able to detect a discharge of 0.2 gph at a line pressure of 150% of operating pressure, or an equivalent leak rate, with a probability of detection within a one month period of at least 0.95 and a probability of false alarm of no more than 0.05. When a discharge of 0.2 gph is detected, the leak detector shall provide audible or visual alarms that can be clearly heard or seen by the operator of the facility, or if monitored remotely on a real time basis, the alarm condition must be immediately transmitted from the remote location to the facility operator; and

e. Instead of using a line leak detector as a method of release detection for pressurized small diameter piping associated with double-walled integral piping, a continuously operating interstitial monitoring device can be used. Continuously operating interstitial monitoring devices shall be capable of detecting a release of 10 gallons within one hour and shutting off the pump.

2. Tightness testing. Tightness testing for pressurized piping in contact with the soil shall be capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(d) Bulk product piping.

1. An annual test shall be performed of single-walled bulk product piping in contact with the soil. Prior to testing the piping system, a leak tightness evaluation of all exposed components shall be performed through visual inspection, or by another method

approved by the Department in accordance with Rule 62-762.851, F.A.C. The evaluation shall be verified and recorded. One of the following methods shall be used for the annual test:

a. A bulk product piping test method approved in accordance with subsection 62-762.851(2), F.A.C.;

b. An API RP 1110 hydrostatic test; or

c. An ASME B31.4 hydrostatic test.

2. Double-walled bulk product and hydrant piping, and other bulk product piping equipped with secondary containment shall have methods of release detection and testing for a breach of integrity that meet the requirements of subparagraph 62-762.641(3)(a)2. or 4., F.A.C., as applicable.

3. Records of all test results shall be maintained in accordance with the Appendix-Test Records of API RP 1110, or Chapter VI of ASME B31.4, as applicable, pursuant to subsection 62-762.711(1), F.A.C.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.640.*

62-762.701 Repairs, Operation and Maintenance of Storage Tank Systems.

(1) General.

(a) Repairs.

1. Repairs shall be performed if any component of a storage tank system is discovered to have:

a. Discharged or contributed to the discharge of a regulated substance;

b. A release of regulated substances or AST water bottoms into secondary containment;

c. The presence of groundwater in the interstice of a double-walled pipe; or

d. An operational or structural problem that could potentially result in a discharge or release.

2. If repairs are required for any component or part of a storage tank system, and the nature of the repair activities or the condition of the component or part of the system requiring a repair may result in a release, and the component or part cannot be otherwise isolated from the system, the storage tank system shall be taken out of operation until the tank has been repaired or replaced. The restrictions against storage tank system operation shall not apply if the system contains heating oil or other fuels used solely for the generation of electricity where the removal of the storage system from service would result in the shut down of electrical generating units serviced by the system.

3. Repairs shall be made:

a. In a manner that will prevent discharges from structural failure or corrosion for the remaining operational life of the storage tank system;

b. In accordance with manufacturer's specifications, NFPA Standard 30 or other applicable reference standards; and

c. To restore the structural integrity of the storage tank system.

4. Repaired components shall be tightness tested, pressure tested, or tested for a breach of integrity, as applicable, before being placed back into service.

5. Repairs to fiberglass reinforced plastic tanks shall be made by an authorized representative of the tank manufacturer or its successor, or in accordance with subsection 62-762.501(2), F.A.C.

6. Piping that is damaged or that has caused a discharge of a regulated substance shall be replaced or repaired. Pipe sections and fittings may be repaired in accordance with applicable standards in subsection 62-762.501(3), F.A.C. Replacement of additional lengths of piping in contact with the soil are exempt from the requirements for secondary containment, provided that:

a. The piping system does not have, or will not have to install, secondary containment until the deadlines established in Rule 62-762.511, F.A.C.; and

b. The length of replacement or additional piping is less than 25% of the total length of the existing integral piping for the individual tank, or 100 feet, whichever is less.

(b) Cathodic protection.

1. Cathodic protection systems shall be installed, operated and maintained to provide continuous corrosion protection to the metal components of those portions of the tank and integral piping in contact with the soil.

2. Inspection and testing requirements.

a. General. Storage tank systems equipped with any type of cathodic protection must be inspected and tested by a Corrosion Professional or a Cathodic Protection Tester within six months of installation or repair and at least every year thereafter in

accordance with the criteria contained in NACE International RP-0169-96 and RP-0193-93, as applicable. Factory-installed (galvanic) cathodic protection systems may be tested every three years.

b. Impressed current systems. Storage tank systems with impressed current systems shall be inspected at intervals not exceeding two months. All sources of impressed current shall be inspected. Evidence of proper functioning shall be current output, normal power consumption, a signal indicating normal operation, or satisfactory electrical state of the protected structure. Impressed current systems that are inoperative for a cumulative period exceeding 1440 hours shall be assessed by a Corrosion Professional to ensure that the storage tank system is structurally sound, free of corrosion holes, and operating in accordance with the design criteria.

c. Sacrificial anode systems. Storage tank systems with sacrificial anodes shall either have permanent test stations for soil-to-structure potential measurements or use temporary field test stations for annual testing in accordance with sub-subparagraph 62-762.701(1)(b)2.a., F.A.C.

3. Storage tank systems with cathodic protection systems that cannot achieve or maintain protection levels in accordance with the design criteria shall:

a. Be repaired in accordance with sub-subparagraph 62-762.701(1)(b)2.a., F.A.C., or

b. Be placed out-of-service in accordance with subsection 62-762.801(1), F.A.C.

4. Records of the continuous operation of impressed current systems and all cathodic protection inspection and testing activities shall be maintained in accordance with paragraph 62-762.701(1)(b), F.A.C.

(c) Operation and maintenance.

1. Spill containment devices, dispenser liners, and piping sumps shall be maintained to provide access for monthly examination and water removal as necessary. Water collected in spill containment devices, or in piping sumps and dispenser liners that is above the opening of the integral piping connection, or any regulated substances collected in these storage tank system components shall be removed and be either reused or properly disposed of.

2. Owners or operators shall ensure that the volume available in the tank is greater than the volume of regulated substances to be transferred to the tank before the transfer is made and shall ensure that any transfer is repeatedly monitored to prevent overfilling and spilling.

3. All release detection devices shall be tested annually to ensure proper operation. The test shall be conducted according to manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed.

4. Petroleum contact water from storage tank systems shall be managed in accordance with Chapter 62-740, F.A.C.

5. Exterior Coatings may be maintained in accordance with SSPC PA-1.

6. Regardless of the method of release detection used, inventory control shall be performed for ASTs containing vehicular fuel that do not have secondary containment.

(2) Stormwater management for secondary containment systems.

(a) The removal or release of stormwater from a facility should be performed in accordance with all applicable Department rules (for example, Chapter 62-25, F.A.C., Regulation of Stormwater Discharge). Owners and operators are advised that other federal, state, or local requirements may apply to these activities.

(b) Accumulated stormwater shall:

1. Be drawn off within one week after a rainfall event unless another frequency is allowed by the facility's stormwater discharge permit or by another instrument, such as a Spill Prevention Control Countermeasure Plan or a Department permit; and

2. Not be discharged without treatment if it has a visible sheen.

(c) If gravity drain pipes are used to remove water from the dike field areas, all valves shall be kept closed except when the operator is in the process of draining water.

(3) API 653 inspections. Field-erected tanks shall be evaluated and the re-testing frequency established and implemented in accordance with API Standard 653. AST Category-B and Category-C tanks shall be evaluated at the time of installation. Initial examinations for AST Category-A and Category-B tanks shall be completed by December 31, 1999. Evaluations shall be certified by a professional engineer registered in the State of Florida, or approved by an API 653 inspector. Non-destructive testing shall be performed by qualified personnel as specified in API 653 and API 650. All field-erected tanks shall be repaired in accordance with API Standard 653.

(4) Testing for piping in contact with soil.

(a) Small diameter piping shall be tightness tested before being placed back into service whenever dispensers connected to that piping are replaced or whenever the piping has been disconnected and then reconnected.

(b) Hydrant piping and bulk product piping shall be pressure tested in accordance with paragraph 62-762.641(3)(e), F.A.C., before being placed back into service.

(5) Bulk product piping extending over surface water shall:

(a) Be tested annually in accordance with Title 33, Part 156.170, Code of Federal Regulation; and

(b) Be maintained and operated in accordance with Title 33, Part 154, as applicable.

(6) Secondary containment systems shall be repaired as necessary to maintain product tightness and containment volume of the system, including sealing cracks in concrete, repairing punctures, and maintaining containment walls. If the storage tank secondary treatment system has a crack, puncture, or other defect that compromises the system's product tightness, the system shall be repaired in accordance with paragraph 62-762.501(1)(e), F.A.C.

(7) Overfill protection shall be performed in accordance with API RP 2350 and NFPA 30, Section 2-10, for each field-erected AST that receives fuel by mainline pipeline or marine vessels.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.700.*

62-762.711 Recordkeeping.

(1) All records shall be dated, maintained in permanent form, and available for inspection by the Department or County. If records are not kept at the facility, they shall be made available at the facility or another agreed upon location upon five working days notice. Site access to the facility shall be provided for compliance inspections conducted at reasonable times.

(2) Records of the following are required to be kept for two years:

(a) Measurements and reconciliations of inventory, as applicable;

(b) Repair, operation, and maintenance records;

(c) Release detection results, including electronic test results, regardless of the frequency, and monthly visual inspections performed in accordance with paragraph 62-762.641(2)(e), F.A.C. The presence of a regulated substance's odor, sheen, or free product shall be recorded for each sampling event;

(d) Release detection response level descriptions;

(e) A copy of all test data and results gathered during tightness tests, pressure tests, and breach of integrity tests, and the name and type of the test approved under Rule 62-762.851, F.A.C.;

(f) Certification of Financial Responsibility on Form 62-761.900(3);

(g) Records of types of fuels stored per tank; and

(h) The repair or replacement of gaskets, valve packings, valves, flanges, and connection/disconnection fittings for bulk product piping if the repair or replacement is performed in response to a discharge or loss of regulated substances.

(3) Records of the following, generated after July 13, 1998, shall be maintained for the life of the storage tank system:

(a) Results of internal inspections and non-destructive testing;

(b) Any performance claims for release detection equipment described in writing by the equipment manufacturer or installer;

(c) Records of storage tank system installations, replacements, and upgrades;

(d) Records of installation, maintenance, inspections, and testing of cathodic protection systems in accordance with NACE standards;

(e) Site suitability determinations in accordance with subsection 62-762.641(2), F.A.C.;

(f) Vapor monitoring plans and all records kept pursuant to the plan; and

(g) Closure assessment reports if the location continues as a facility.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761-710.*

62-762.801 Out-of Service and Closure Requirements.

(1) Temporary out-of-service. Field-erected storage tank systems taken temporarily out-of-service shall:

(a) Continue to operate and maintain corrosion protection in accordance with paragraph 62-762.701(1)(b), F.A.C.;

(b) If the tank system has an external release detection method, perform release detection monthly in accordance with applicable provisions of Rules 62-762.601-.641, F.A.C.; and

(c) Leave venting systems open and functioning.

(2) Out-of-service storage tank systems.

(a) General.

1. Storage tank systems that are taken out-of-service, as defined in subsection 62-762.201(53), F.A.C., shall:

a. Continue to operate and maintain corrosion protection in accordance with paragraph 62-762.701(1)(b), F.A.C.;

b. Perform external release detection for sites without contamination, as applicable, every six months in accordance with provisions of subsection 62-762.641(2), F.A.C.;

c. Leave vent lines open and functioning;

d. Empty the system and cap or secure all lines, pumps, manways, and ancillary equipment, as applicable; and

e. Secure or close off the system to outside access.

2. If the storage tank system is required to be upgraded during the time that it is out-of-service, it shall be upgraded or replaced in accordance with this chapter before it is returned to service.

3. Systems with secondary containment installed and operated in accordance with this chapter may remain in a continuous out-of-service status for ten years. After this period, the system shall be returned to service or closed in accordance with subsection 62-762.801(3), F.A.C.

4. Tightness, pressure, or other tests shall be performed in accordance with subsection 62-762.641(3), F.A.C., as applicable, on any systems being returned to service.

(b) Systems without secondary containment shall not remain in a continuous out-of-service status for more than five years. Before the expiration of this five year time period, any remaining product and sludges shall be removed, and a closure assessment shall be performed in accordance with subsection 62-762.801(4), F.A.C. for:

1. AST Category-A and Category-B systems, regardless of when taken out-of-service, by December 31, 1999; or

2. Systems taken out-of-service after July 13, 1998.

(c) Out-of-service tanks that are returned to service shall be:

1. Inspected and evaluated in accordance with subparagraph 62-762.501(3)(b)1., F.A.C., for shop-fabricated tanks; or

2. Structurally evaluated in accordance with API Standard 653 for field-erected tanks, unless the system has been out-of-service for less than six months.

(d) Field-erected tanks changing the type of product stored within the tank shall comply with API Standard 653, Section 2.2.4.

(3) Closure of storage tank systems.

(a) General.

1. Closure of storage tank systems shall be performed by:

a. Removing all liquids and accumulated sludges;

b. Disconnecting and capping, or removing, all integral piping. Manways shall be secured to prevent access;

c. Closing the storage tank system in accordance with paragraphs 62-762.801(3)(b), F.A.C., as applicable; and

d. Conducting a closure assessment in accordance with subsection 62-762.801(4), F.A.C.

2. After closure, storage tank systems may be used to store materials or substances other than regulated substances in accordance with all applicable Department reference standards, (for example, API 1604). Owners and operators are advised that other federal, state, or local requirements may apply to these activities.

3. Monitoring wells associated with closed systems that are not being used for release detection or site assessment purposes shall be closed in accordance with paragraph 62-762.601(1)(k), F.A.C.

(b) Unmaintained systems shall be permanently closed within 90 days of discovery.

(c) The tank shall be rendered free of pollutant vapors at the time of closure to prevent hazardous explosive conditions, and maintained to prevent future explosive conditions.

(d) The tank shall be protected from flotation in accordance with NFPA 30, Section 2-6.

(4) Closure assessment of storage tank systems.

(a) At time of closure, replacement, installation of secondary containment, or change in service from a regulated substance to a non-regulated substance, an assessment shall be performed to determine if a discharge from the system or system components has occurred.

1. If a Site Rehabilitation Completion Order (SRCO) or a Monitoring Only Plan (MOP) Approval Order has been issued by the Department for a contaminated area of a site, a closure assessment shall be performed for any subsequent storage tank system removal, replacement, or installation of secondary containment.

2. Tanks, pipes, or other system components in contact with soil at any site are subject to closure assessment requirements.

(b) A closure assessment is not required for:

1. Sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C., including those that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Nevertheless, documentation of procedures followed and results obtained during closure shall be reported in a Limited Closure Summary Report, Form 62-761.900(8), and in accordance with Section A of DEP's "Storage Tank System Closure Assessment Requirements";

2. Systems initially installed with secondary containment, provided that no unexplained positive response of an interstitial release detection device or method occurred during the operational life of the system, or the secondary containment passed a breach of integrity test prior to closure;

3. Systems upgraded with secondary containment that have closed interstitial spaces, where a closure assessment was performed prior to installation of secondary containment, provided that the secondary containment passed a breach of integrity test in accordance with paragraph 62-762.641(3)(a), F.A.C.;

4. Double-walled shop-fabricated aboveground tanks; and

5. Aboveground systems with storage capacities less than 1,100 gallons that are upgrading with secondary containment, and that are elevated from and not in contact with the soil. Instead of performing a closure assessment, a visual inspection may be performed of the system and the ground surface underneath it for signs of a discharge. Written certification shall be provided to the County within 10 days after installation of the secondary containment, documenting that there has been no discharge.

(c) Closure assessment sampling and analysis shall be conducted according to DEP's "Storage Tank System Closure Assessment Requirements."

(d) A closure assessment report shall be submitted to the County within 60 days of completion of any of the activities listed in paragraph 62-762.801(4)(a), F.A.C. The report shall include sample types, sample locations and measurement methods, a site map, methods of maintaining quality assurance and quality control, and any analytical results obtained during the assessment in accordance with DEP's "Storage Tank System Closure Assessment Requirements."

(e) Persons are advised that contaminated soil excavated, disposed of, or stockpiled on site during the closure of a storage tank system is regulated by Chapter 62-770, F.A.C.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.800.*

62-762.821 Incident and Discharge Response.

(1) Incident response.

(a) If an incident occurs at a facility, actions shall be taken promptly to investigate the incident to determine if a discharge has occurred. Notification of the incident shall be sent to the County on Form 62-761.900(6). A discharge shall be reported in accordance with subsection 62-762.451(3), F.A.C., if one is discovered during the incident investigation.

(b) If the investigation indicates that the incident was not a discharge, a written confirmation and explanation shall be submitted to the County. Test results or reports, which support the findings, shall be maintained on site as records.

(c) The investigation shall be completed within two weeks of the date of discovery of the incident. At the end of this time period, either a discharge report form or a written confirmation and explanation that the release was not a discharge shall be submitted to the County.

(d) Any spill or loss of regulated substance into secondary containment shall be removed within three days of discovery.

(2) Discharge response.

(a) If a discharge of a regulated substance occurs at a facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules (for example, Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria). Owners and operators are advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-770, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that chapter.

(b) When evidence of a discharge from a storage tank system is discovered and reported in accordance with subsection 62-762.451(3), F.A.C., the following actions shall be taken:

1. If the source or cause of the discharge is unknown, the discharge shall be investigated in accordance with NFPA 329,

Chapters 3 and 5;

2. The regulated substance shall be removed from the system as necessary to prevent further discharge to the environment. Notice of the need to take the system out-of-service on an emergency basis shall be made to the County in accordance with subsection 62-762.451(1), F.A.C.;

3. Fire, explosion, and vapor hazards shall be identified and mitigated; and

4. The system shall be repaired in accordance with Rule 62-762.701, F.A.C. If the system cannot be repaired, it shall be closed in accordance with subsection 62-762.801(3), F.A.C.

(c) The system shall be tested if the Department or County determines that:

1. There has been a failure to comply with the release detection requirements of Rules 62-762.601-.641, F.A.C.;

2. A release detection device, well, or method indicates that a discharge of a regulated substance has occurred, and the discharge was not previously reported; or

3. Groundwater contamination that is not associated with previously known contamination is present in the vicinity of the system and the system is likely to be a source of the contamination.

(d) Within three days of the discovery of a discharge, the following steps shall be initiated:

1. A test on the system in accordance with subsection 62-762.641(3), F.A.C., if the test is necessary to confirm a discharge; and

2. If found to be leaking, placement of the system out-of-service in accordance with subsection 62-762.801(2), F.A.C., until repaired, replaced or closed.

(e) Contaminated soil excavated, disposed of, or stockpiled on site during the closure of a storage tank system shall be managed in accordance with Chapter 62-770, F.A.C.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.820.*

62-762.851 Alternative Requirements and Equipment Approvals.

(1) Alternative requirements.

(a) Any person subject to the provisions of this chapter may request in writing a determination by the Secretary or the Secretary's designee that any requirement of this chapter shall not apply to a regulated storage tank system at a facility, and shall request approval of alternate procedures or requirements.

(b) The request shall set forth at a minimum the following information:

1. The specific storage tank system or facility for which an exception is sought;

2. The specific provisions of Chapter 62-762, F.A.C., from which an exception is sought;

3. The basis for the exception;

4. The alternative procedure or requirement for which approval is sought;

5. Documentation that demonstrates that the alternative procedure or requirement provides an equivalent or greater degree of protection for the lands, surface waters or groundwaters of the State as the established requirement; and

6. Documentation that demonstrates that the alternative procedure or requirement is at least as effective as the established procedure or requirement.

7. If an alternate procedure or requirement is not able to be sought under subparagraph 5. or 6., then documentation that demonstrates that the specific provisions of this chapter from which the exception is sought imposes regulatory costs on the regulated entity that could be reduced through approval of a less costly regulatory alternative or requirement that provides a substantially equivalent degree of protection for the lands, surface waters, or groundwaters of the State as the established requirement.

(c) Within 60 days of the receipt of a request for approval of an alternative procedure or requirement, the Department shall approve the request or notify the responsible party in writing that the request does not demonstrate that the requirements of subsection 62-762.851(1), F.A.C., are met.

(d) The Secretary or the Secretary's designee shall specify by order each alternative procedure or requirement approved for an individual storage tank system or facility in accordance with this rule or shall issue an order denying the request for such approval. The Department's order shall be agency action, reviewable in accordance with Section 120.569 and 120.57, F.S.

(e) The provisions of this rule do not preclude the use of any other applicable relief provisions.

(2) Equipment approvals.

(a) Storage tank system equipment used in the State of Florida must have the approval of the Department before installation or use, with the exception of:

1. Dispensers, dispenser islands, nozzles, and hoses;
2. Monitoring well bailers;
3. Manhole and fillbox covers;
4. Valves;
5. Cathodic protection test stations;
6. Metallic bulk product piping;
7. Small diameter piping not in contact with soil, unless the piping extends over or into surface waters;
8. Vent lines; and
9. AST vents.

(b) Equipment approval requests shall be submitted to the Department with a demonstration that the equipment will provide equivalent protection or meet the appropriate performance standards contained in this chapter. Any approvals or denials received from other states shall be included in the approval request to the Department.

(c) A third-party demonstration by a Nationally Recognized Laboratory shall be submitted to the Department with the application. The third-party demonstration shall provide:

1. A technical evaluation of the equipment;
2. Test results that verify that the equipment will function as designed; and
3. A professional certification that the equipment meets the performance standards contained in Rule 62-762.501, F.A.C.

(d) Within 60 days of the receipt of a request for an equipment approval, the Department shall approve the request or notify the responsible party in writing that the request does not demonstrate that the requirements of subsection 62-762.851(2), F.A.C., are met.

(e) The Secretary or the Secretary's designee shall specify by order each equipment approval that is approved in accordance with this rule or shall issue an order denying the request for such approval. The Department's order shall be agency action, reviewable in accordance with Section 120.569 and 120.57, F.S.

Specific Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.850.*

62-762.891 Mineral Acid Storage Tank Requirements.

(1) Definitions. The following words, phrases, or terms used in this rule, unless the context indicates otherwise, shall have the following meaning:

(a) "Aboveground" means that more than 90 percent of a tank volume is not buried below the ground surface. An aboveground tank may either be in contact with or elevated above the ground.

(b) "Containment and integrity plan" or "CIP" means a document designed, created, and maintained at a facility, which shall be considered a public record and made available pursuant to the provisions of Chapter 119, F.S. The CIP establishes procedures for the inspection and maintenance program for tanks storing mineral acids at that facility. The inspection and maintenance program shall be designed for the chemical and physical characteristics of the specific mineral acid stored, and for the specific materials of construction of the tank. The CIP shall be designed to ensure control of the specific mineral acid for the expected lifetime of the tank.

(c) "Discharge" includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any mineral acid which occurs and which affects lands and the surface and ground waters of the state.

(d) "Discovery" means, as related to a discharge, initial detection of mineral acids in ground water or surface water, or the initial detection of soil contamination, resulting from the discharge of mineral acids in quantities greater than the amounts reportable in Rule 62-762.891, F.A.C.

(e) "Existing storage tank" means a tank that was installed on or before January 7, 1992. Installation is considered to have begun if:

1. The owner or operator has obtained, or has applied for, all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank; and
2. Either a continuous on-site physical construction or installation program has begun or the owner or operator has entered

into contractual obligations which cannot be cancelled or modified without substantial economic loss.

(f) “Facility” means any non-residential location or part thereof containing an aboveground tank or tanks that contain specified mineral acids that have an individual storage capacity greater than 110 gallons.

(g) “Flow-through process tank” means an aboveground tank that contains hazardous substances or specified mineral acids and that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks include, but are not limited to, seal tanks, vapor recovery units, surge tanks, blend tanks, feed tanks, check and delay tanks, batch tanks, oil-water separators, or tanks in which mechanical, physical, or chemical change of a material is accomplished.

(h) “Inspection and maintenance plan” means a plan that establishes the procedures used to prevent releases of mineral acids.

(i) “Liner” means an artificially constructed material of sufficient thickness, density, and composition that will contain the discharge of any specified mineral acid from an aboveground tank until such time as the mineral acid can be neutralized and/or removed. The liner shall prevent any escape of specified mineral acids or accumulated liquid to the soil, surface water, or groundwater (except through secondary containment as provided in paragraph 62-762.891(1)(p), F.A.C.).

(j) “Mineral acids” means hydrobromic acid (HBr), hydrochloric acid (HCl), hydrofluoric acid (HF), phosphoric acid ($H_3 PO_4$), and sulfuric acid ($H_2 SO_4$), including those five acids in solution, if at least 20% by weight of the solution is one of the five listed acids.

(k) “New tank” means a tank that was installed after January 7, 1992.

(l) “Non-residential” means that the tank is not used at a private dwelling.

(m) “Operator” means any person operating a facility, whether by lease, contract, or other form of agreement.

(n) “Owner” means any person owning an aboveground tank subject to Sections 376.320-.326, F.S.

(o) “Permitted wastewater treatment system” means a facility to which the Department has issued a permit to treat wastewater and release the treated product into the environment.

(p) “Secondary containment” means a system that is used for release prevention, and may include one or more of the following devices:

1. A double-walled tank;

2. An external liner; or

3. A system or structure constructed such that accidental releases from a tank would be collected by a drainage system within the system or structure and routed to a permitted wastewater treatment system, plant recirculating process system, or alternative containment system approved by the Department in accordance with Rule 62-762.851, F.A.C.

(q) “Stationary” means a tank or tanks not meant for multiple site use or that remain in one location at the facility site for a period of 180 days or longer.

(r) “Tank” means an aboveground stationary device that is constructed primarily of non-earthen materials (e.g., concrete, metal, plastic, glass) that provides structural support and is designed primarily to contain mineral acids. Connected piping from the tank to and including the nearest cutoff valve shall be considered part of the tank for purposes of this definition. “Tank” does not include flow-through process tanks.

(s) “Upgrade” means the replacement of a tank or the installation of secondary containment.

(2) Applicability.

(a) The requirements of this rule apply to owners and operators of a facility with an aboveground storage tank with a storage capacity of more than 110 gallons that contains mineral acids.

(b) The following systems are exempt from the requirements of this rule:

1. Any mobile or skid tank that is moved at least every 180 days;

2. Any tank containing mineral acids that are less than 20% by weight of the solution;

3. Any tank of 110 gallons or less capacity that contains mineral acids;

4. Any flow-through process tank; and

5. Any tank containing mineral acids that are regulated as hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act.

(3) Registration.

(a) The owner of any tank containing mineral acids shall register the tank with the Department on Form 62-761.900(2).

(b) A completed registration form shall be submitted to the Department by July 1, 1992, or no later than 30 days after mineral acids are put into a new storage tank.

(c) Each facility shall receive a registration placard upon payment of all applicable fees. The placard shall be available for inspection by the Department and filed with records maintained in accordance with Rule 62-762.891, F.A.C.

(4) Registration fees.

(a) Registration fees are due from the owner or operator for all registered tanks as indicated in this subsection.

(b) Registration fee schedule.

1. Within 30 days after receipt of notification by the Department, the following fees shall be submitted:

a. $50.00 per tank for each initial registration;

b. $25.00 per tank for annual renewal of tanks with capacities of 125,000 gallons or less; and

c. One dollar per every 5,000 gallons of storage capacity, per tank, for annual renewal of tanks with capacities of greater than 125,000 gallons.

2. Total annual registration fees for renewals shall not exceed $2,500.00 per facility.

(5) Notification.

(a) The Department shall be notified of the following items on Form 62-761.900(2):

1. The date and method of closure, at least 30 days before closure of a tank;

2. Any change in ownership of a tank, no later than 30 days after ownership has been transferred. The notice of change of ownership shall be provided by the transferor. The notice shall include a copy of the bill of sale or a letter of acceptance by the new owner;

3. Upgrading of a tank, at least 10 days before upgrading occurs, except for emergency replacements of tanks or connected piping required by an actual or anticipated discharge. Notification of emergency replacement shall be provided within 10 days after the emergency replacement.

4. Any change in registration form information, including any change in the identity of the material being stored.

(b) The Department shall be notified of the certification of the CIP or the secondary containment system on Form 62-762.891(1) within 10 days of the completion of the form. The Containment and Integrity Plan Certification Form shall be signed by a professional engineer registered in the State of Florida.

(c) Within three working days of discovery, the Department shall be notified of any release into a secondary containment system of a mineral acid in excess of 110 gallons, or the reportable quantity in effect on July 1, 1991, under the Comprehensive Environmental Response Compensation and Liability act of 1980, whichever is greater.

(6) Reporting of discharges. Within 24 hours of discovery, or before the close of the next business day, Form 62-761.900(1) shall be used to report any discharge exceeding:

(a) 100 pounds of hydrobromic or hydrofluoric acid;

(b) 1000 pounds of sulfuric acid; or

(c) 5000 pounds of hydrochloric or phosphoric acid.

(7) Performance standards for mineral acid tanks.

(a) General.

1. Existing mineral acid storage facilities that were in operation after January 1, 1992, shall have either a CIP or secondary containment.

2. New or replacement mineral acid tanks installed after July 1, 1992, shall have secondary containment.

(b) Containment and Integrity Plans. The CIP shall include procedures and requirements to minimize the risk of spills, releases, and discharges from tanks. The CIP shall be reviewed and updated at least every two years by a professional engineer registered in the State of Florida. The CIP shall be made available for inspection by the Department, and shall address:

1. An inspection and maintenance program detailing:

a. The qualifications of the person providing the inspection;

b. The inspection and routine maintenance procedures;

c. Schedules used to evaluate and maintain the integrity of the tank, and seconday containment (if applicable);

d. Release detection procedures; and

e. Frequency of inspections and proper response to inspection findings.

2. Materials of construction for each tank and compatibility of the mineral acid with the construction materials;

3. Secondary containment of tanks, if applicable;

4. Location of surface water bodies near the tank and the potential for discharges to enter the surface water body or to move off-site;

5. Discharge response procedures for containment and abatement;

6. Cleanup procedures; and

7. For tanks without secondary containment, the CIP shall also address:

a. Procedures and equipment for treating spill wastes;

b. Procedures for disposing of spill wastes;

c. Containment and diversionary structures to prevent discharges from entering the nearby surface water bodies or moving off-site; and

d. A demonstration of corrosion protection of the tank if the tanks are in contact with the soil.

(c) Containment and Integrity Plan alternatives. In place of the CIP, a certification may be provided to the Department by a professional engineer registered in the State of Florida that:

1. No mineral acid tank at the facility is in direct contact with the ground; and

2. A secondary containment system has been placed under and around each tank, and sealed to its supports. Secondary containment shall be either:

a. Designed and built to contain in excess of 110% of the capacity of the largest tank within the containment; or

b. Equipped with a drainage system routed to a permitted wastewater treatment system that is capable of containing any accidental release from the tank.

(d) Secondary containment. Tanks installed after July 1, 1992, shall have secondary containment and meet the requirements of this section before the tank is placed into active service. Liners used for secondary containment that are installed after July 13, 1998 shall meet the requirements of subparagraphs 62-762.501(1)(e)1.-3., F.A.C.

(e) Certification. A professional engineer registered in the State of Florida shall certify that:

1. The tanks covered by the CIP for that facility have been inspected and maintained in accordance with the CIP and that the integrity and containment of the tanks has not been compromised. For purposes of this certification, maintenance will be presumed to have been performed if the professional engineer verifies that records demonstrating compliance with this subsection are available, complete, and indicate proper maintenance; or

2. The tank or tanks have secondary containment in accordance with this subsection.

(8) Recordkeeping. Copies of the following shall be maintained and made available for inspection by the Department at reasonable times:

(a) The Containment and Integrity Plan; or

(b) The certification of secondary containment.

(9) Discharge response.

(a) When evidence of a discharge from a tank is discovered and reported in accordance with subsection 62-762.891(6), F.A.C., the owner or operator shall:

1. Remove as much of the mineral acid from the tank as necessary to prevent further discharge;

2. Repair the tank in accordance with original design specifications; and

3. If the storage tank cannot be repaired, all mineral acid shall be removed from the tank and the tank shall be permanently closed.

(b) Any owner or operator of a facility discharging mineral acids shall immediately undertake to contain, remove, neutralize, or otherwise abate the discharge.

(10) Forms. Copies of forms may be obtained by writing to the Administrator, Storage Tank Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The following forms shall be used for mineral acid tanks:

(a) Discharge Report Form 62-761.900(1), July 13, 1998.

(b) Storage Tank Facility Registration Form 62-761.900(2), July 13, 1998.

(c) Containment and Integrity Plan Certification Form 62-762.891(1), July 13, 1998.

Specific Authority 376.322(3), 403.087 FS. Law Implemented 376.324, 376.325, 403.087 FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.890.*

62-762.901 Storage Tank Forms.

The forms used by the Department in the Storage Tank System Program are adopted and incorporated by reference in this section.

The forms are listed by rule number, which is also the form number, and with the subject title and effective date. Copies of forms may be obtained by writing to the Administrator, Storage Tank Regulation Section, Division of Waste Management, Florida Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4525, Tallahassee, Florida 32399-2400.

(1) Form 62-761.900(1) Discharge Report Form, July 13, 1998.

(2) Form 62-761.900(2) Storage Tank Facility Registration Form, July 13, 1998.

(3) Form 62-761.900(3) Certification of Financial Responsibility, July 13, 1998.

(4) Form 62-761.900(4) Alternative Requirement or Procedure Form, July 13, 1998.

(5) Form 62-761.900(6) Incident Notification Form, July 13, 1998.

(6) Form 62-761.900(8) Limited Closure Summary Report Form, July 13, 1998.

Specific Authority 376.303, FS. Law Implemented 376.303, FS. History–New 6-21-04.

Editorial Note: *Formerly 62-761.900.*