Certification of the Applicability of the Substantial Harm Criteria

National Weather Service
WFO/RDA
5974 Commerce Boulevard
Morristown, TN 37814

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

Yes _____ No __X__

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

Yes _____ No __X__

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

Yes _____ No __X__

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

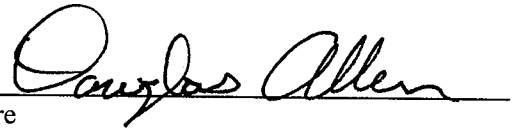
Yes _____ No __X__

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

Yes _____ No __X__

Certification

I certify under penalty of law that I, or my agent, 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

Douglas Allen
Name (please type or print)

Project Engineer
Title

February 16, 2005
Date

[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).

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

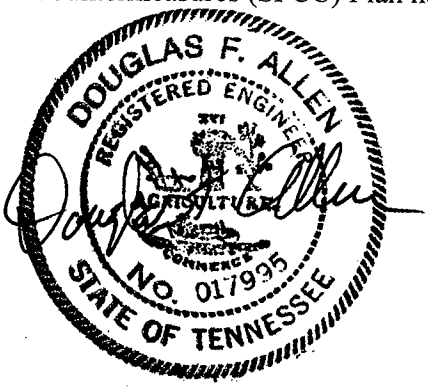
NATIONAL WEATHER SERVICE
WFO/RDA
5974 Commerce Boulevard
Morristown, TN 37814

Original Date of Plan:	March 1996
Date of Last Plan Review:	August 2004
Date of Last Amendment and P.E. Certification:	February 2005

Designated Person Responsible for Spill Prevention:
Brian Taylor, Electronics Technician
Telephone: (423) 586-4067

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasures (SPCC) Plan has been prepared in accordance with good engineering practices.



Douglas Allen
Printed Name of Professional Registered Engineer

Signature of Registered Professional Engineer Date: 2/16/05

Registration No. 017995 State: TN

REVIEW DOCUMENTATION AND MANAGEMENT APPROVAL PAGE

REVIEW DOCUMENTATION

In accordance with Title 40 of the Code of Federal Regulations (CFR) Part 112.5(b), a review and evaluation of this Spill Prevention, Control, and Countermeasures (SPCC) Plan will be conducted at least once every 5 years. As a result of this review and evaluation, the National Weather Service will amend the SPCC Plan within 6 months of the review to include more effective prevention and control technology if the following both apply:

- Such technology will significantly reduce the likelihood of a spill event from the facility and
- If such technology has been field-proven at the time of review.

In accordance with 40 CFR 112.1 and 112.3, any amendment to the SPCC Plan shall be certified by a Professional Engineer within 6 months after a change in the facility design, construction, operation, or maintenance occurs that materially affects the facility's potential for a discharge of oil "…in quantities that may be harmful... into or upon the navigable waters of the United States or adjoining shorelines or waters of the contiguous zone... or that may affect natural resources..."

Review Date	Signature of Designated Person	Amended (Yes or No)?

MANAGEMENT APPROVAL

The National Weather Service is committed to the prevention of discharges of oil to navigable waters and the environment. We maintain the highest standards for SPCC through regular review, update, and implementation of this SPCC Plan for the National Weather Service facility located at 5974 Commerce Boulevard, Morristown, TN 37814.

_____

Printed Name and Title of Meteorologist In Charge

_____

Signature and Date

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PART I - GENERAL INFORMATION

A. GENERAL

This section of the Spill Prevention, Control, and Countermeasures (SPCC) Plan provides general information about the facility and a description of the site and its operations.

NOTE: A complete copy of this SPCC Plan will be maintained and kept available at the Knoxville/Tri-Cities WFO Office, Morristown, Tennessee.

1. Name

National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS) Weather Forecast Office (WFO).

2. Type

This facility is an onshore (non-production) facility that operates as a Weather Forecast Office. The facility has a Radar Data Acquisition (RDA) building at the NEXRAD radar system.

3. Date of Initial Operation

The NOAA WFO became operational on June 17, 1994. The facility included two emergency generators and their associated fuel systems. The original 1,000-gal aboveground storage tank (AST) serving the main facility emergency generator was replaced on November 15, 2000 with a Delzotto Products, Inc., pre-cast, reinforced concrete AST.

4. Location

National Weather Service	Latitude:	36° 10′ 10″ N
Weather Forecast Office	Longitude:	83° 24′ 16″ W
5974 Commerce Boulevard	Elevation:	1,300 ft
Morristown, TN 37814		
(423) 586-3771		

5. Name and Address of Operator

National Oceanic and Atmospheric Administration
National Weather Service - Southern Region Headquarters
819 Taylor Street
Room 10A06
Fort Worth, TX 76102
(817) 978-2367

6. Facility Contacts

Name	Title	Telephone Number
Main Number/WFO	—	(423) 586-3771
William Alexander	MIC	(423) 586-6429
Michael Teer	Electronic Technician	(423) 586-4067

B. SITE DESCRIPTION AND OPERATIONS

This section describes the site and its operations.

1. Facility Location, Layout, and Operations

The facility is located in Hamblen County, Tennessee, in the city of Morristown. Figure 1 in Appendix J is a map of the local Morristown area. Figures 2 and 3 in Appendix J show the layout of the facility, including the oil and diesel storage locations. The facility has five storage containers holding 55 gal or more of fuel or oil. The storage containers include:

- 1,000-gal main facility diesel generator AST,
- 225-kVa transformer (holds 161 gal of oil),
- 55-gal used oil drum, and
- Two 200-gal diesel generator ASTs.

In addition, the facility has a 30-gal dielectric fluid tank and one 30-gal generator day tank containing diesel fuel. The dielectric fluid tank housed in the RDA building is used to operate the radar instrumentation. The building itself would serve as secondary containment for the fluid in the event of a spill. Photograph 1 in Appendix I shows the 30-gal dielectric fluid tank. The 30-gal generator day tank contains diesel for the main facility generator located in the Generator Building. The fluid in these vessels does not count toward the calculation of the facility's capacity since the containers hold less than 55 gal.

The fuel in the 1,000-gal diesel generator AST is used to operate a 175-kW emergency power generator for the main facility. The fuel is pumped to the 30-gal generator day tank, which is equipped with a float switch to activate and deactivate the fill pump. The day tank and the generator are located in the enclosed Generator Building. The generator is on a timer and is programmed to run for 1 hour each week. Both the Generator Building and the AST are locked at all times and access is controlled. The estimated fuel usage is 25 gal/month.

The 225-kVa transformer contains 161 gal of oil and is maintained by Morristown Utilities. The 55-gal used oil drum contains both used oil and antifreeze from the generators, rain gauges, and other equipment. The facility has a contract with Safety Kleen to pump the used oil from the drum as needed and properly dispose of it.

The two 200-gal diesel generator ASTs are housed inside the Radar Generator Building. The two tanks are connected in tandum directly to the 75-kW generator housed in the same building. This

generator is used exclusively to provide power to the radar systems in the event of a power outage. The radar generator is also connected to a timer set to run the generator for 1 hour each week.

The WFO is not enclosed in a fenced area; however the facility is manned 24 hours/day, 365 days/year, and security cameras are strategically placed around the facility. All buildings are kept locked. The RDA and associated buildings are in a fenced compound that is also kept locked. The exterior of the entire facility is lighted at night.

2. Facility Storage

The storage areas with containers of 55 gal or more are discussed in detail in the following sections.

1,000-gal Main Facility Diesel Generator AST

The double-walled AST is rectangular in shape and horizontally situated. The 1,000-gal welded steel plate primary tank is enclosed in a pre-cast, reinforced concrete secondary containment system. The AST is protected from traffic by being mounted on a concrete pad immediately behind the northeast side of the Generator Building. A single driveway located on the south side of the Generator Building provides access to the tank for filling. Photographs 2, 3, and 4 in Appendix I show the AST and it's immediate surroundings.

The AST fill spout is equipped with an automatic shut-off valve and a 15-gal spill container. The AST is also equipped with an audible high-level alarm and an interstitial monitoring device between the AST walls. The alarm cabinets are located in the Operations Area and beside the tank. The NWS is responsible for the AST refueling operations at the AST.

The AST is connected to a pump on top of the 30-gal generator day tank via a single supply line. The supply line is constructed of steel pipe and is equipped with a shut-off valve, secondary containment, and backflow preventer. This pump moves fuel from the AST into the day tank. The day tank is a single-walled, rectangular steel tank set in an open top spill pan (rupture basin). The day tank is connected to the generator by flexible rubber supply and return lines. The day tank is equipped with a float switch for automatic fill and shut-off. The tank does not have an overflow prevention alarm. Curbing is also not present at the door entering the Generator Building. Photographs 5 and 6 in Appendix I show the generator, the day tank (located in front of the generator), and the pump mounted on top of the day tank.

225-kV Transformer

A 225-kV transformer is located just north of the 1,000-gal diesel generator AST (see Photograph 7 in Appendix I) and contains 161 gal of oil. Transformer maintenance is performed by Morristown Utilities. NWS personnel are not responsible for any transformer maintenance activities and do not oversee Morristown Utilities personnel while the transformer is being serviced. The transformer is not equipped with secondary containment.

55-gal Used Oil Drum

Used oil and antifreeze are drained and collected from equipment and placed in a 55-gal drum. The drum is kept in a heavy-duty plastic storage unit located to the east, across the access drive, beside the 1,000-gal main facility diesel generator AST. The plastic storage unit also houses a 55-gal drum for used absorbents and a 25-gal drum for aerosol cans. The storage unit and 55-gal drum are shown in Photographs 8 and 9 in Appendix I. The used oil is pumped from the drum by Safety Kleen Corporation and is hauled away for proper disposal. NWS personnel oversee the activities conducted by Safety Kleen personnel.

200-gal Diesel Generator ASTs

Two 200-gal diesel generator ASTs are located on the northeast wall inside the Radar Generator Building. These tanks are the primary and secondary tanks used to fuel the radar emergency generator located in the center of the building. All piping leading from the tanks to the generator is contained inside the building. The tanks and piping inside the building are shown in Photographs 10, 11, and 12 in Appendix I. The open entrance to the Radar Generator Building and the area immediately surrounding the building is shown in Photograph 13. The building serves as the secondary containment for the tanks and the generator. However, the floor/wall seam is not well sealed.

Table 1 in Part I.B.7 summarizes the storage capacities at WFO Morristown.

3. Drainage Pathway and Distance to Navigable Waters

Any fuel or oil spilled from the storage areas discussed above or a delivery truck will flow east. Diesel fuel from the 1,000-gal main facility diesel generator AST would flow across the paved driveway into a grassy area and subsequently flow downhill into the parking lot of an adjacent facility. The path to the east away from the 1,000-gal main facility diesel generator AST is shown in Photograph 14 in Appendix I. The hillside leading down to the adjacent parking lot is shown in Photograph 15. Oil from the transformer would cross a grassy area just west of the 1,000-gal main facility diesel generator AST and then follow the same path across the grass and downhill. The 55-gal used oil drum is located across the paved driveway to the east of the AST. A spill from the 55-gal used oil drum would flow down the driveway and then to the east along the same path described above.

The fuel in the two 200-gal diesel generator ASTs would flow out the door of the Radar Generator Building and into a graveled area. The driveway that runs between the Generator Building and the 55-gal used oil drum and that leads to the graveled area around the RDA and Radar Generator Buildings is shown in Photographs 16 and 17 in Appendix I. Upon leaving the graveled area, the fuel would travel to the east and down the same hill shown in Photograph 15. Ultimately, all the fuel and oil could potentially travel to a series of sinks to the east and south of the facility. No channels, dikes, or other water conveyance systems that could allow a spill to reach a surface water body are present. A water body is not documented close to the facility. The closest navigable water way is the Holston River (Cherokee Reservoir). The closest embayment of this navigable waterway is located approximately 2 miles northwest of the facility. It is most

likely that this navigable waterway would not be impacted from a spill at this facility. The primary water resource at risk from a spill would be groundwater.

Two 70-gal spill kits designed to absorb diesel fuel and oil are stored adjacent to the used oil storage area (shown in Photographs 8 and 9) immediately across the driveway from the 1,000-gal main facility diesel generator AST. Absorbent pads are also stored inside the Generator Building.

4. Spill History

Reportable spill events from 1994 to present (date on cover of this plan):

None.

However, on June 25, 2004, a minor spill (approximately 25 gal) occurred due to a failed oil filter on the radar emergency generator. The spill was discovered during the regularly scheduled inspection of the building. The spill was contained within the Generator Building except for a minor seep on the northeast side of the building at the seam between the wall and floor. This minor seep caused some oil stains on the side of the building, but no further leakage to the environment could be identified.

5. Spill Potential, Volumes, and Rates

The most probable causes for potential spills from the ASTs, transformer, and the used oil drum are from overfilling. For the ASTs, ruptured hoses during fuel unloading or failure of the fuel supply line to the day tanks are also potential spill sources. For the ASTs, spills caused by loss of structural integrity, vehicle collisions, or earthquakes are low probability events. Probable causes of spills from the generator day tanks are from failure of the fuel transfer pumps to shut down or failure of the lines from the pumps to the day tanks.

If conducted according to plan and with good management practices, large spills from fueling operations are not likely.

Table 2 summarizes the potential types of spills, volumes, and rates.

6. Discussion of Facility Conformance with 40 CFR 112

Every effort has been made, by the NWS, to ensure that this facility fully conforms to the applicable provisions of 40 CFR 112. The following is a brief summary of the applicable characteristics of the facility:

a. The facility is manned 24 hours/day, 365 days/year. The generators are tested monthly, and on a daily basis NWS personnel are working near and around both generator systems, decreasing the likelihood of a large spill incident. The facility is located in the city of Morristown where rapid response is available in the event of a serious fuel or oil spill.

b. The 1,000-gal main facility diesel generator AST is adjacent to the Generator Building and is connected to the 30-gal generator day tank by piping equipped with secondary containment up to the point of entry into the building. This AST is a double-walled steel tank with secondary containment. The AST contains electronic monitors and alarms as well as a 15-gal spill bucket and automatic overfill shut-off valves.

c. The two 200-gal diesel generator ASTs in the Radar Generator Building are connected via piping to the emergency generator day tank. The ASTs, day tank, and generator are located in the same building. There are no alarms or detection systems installed in the building for leak detection.

d. The 225-kVa transformer located on the property contains 161 gal of oil. The transformer is maintained by a contracted service, and NWS personnel do not participate in or oversee the service visits. Because of fire prevention concerns, it is not practical to provide secondary containment for this storage unit.

e. The 55-gal used oil drum is located inside an outdoor storage unit that provides secondary containment for the drum. Oil is transferred to the drum by facility personnel and removed from the drum by a contracted service.

f. The SPCC Plan:

   i. Has full approval of the appropriate NWS managers.
   ii. Has been prepared and certified by a Professional Engineer.
   iii. Provides for prevention efforts to ensure that fuel oil discharges will not occur.
   iv. Provides a vehicle to ensure that personnel training is accomplished.
   v. Provides for appropriate reporting of oil discharges.
   vi. Provides for appropriate mitigating actions to be taken if an oil discharge should occur.

7. Type of Oil and Storage Capacity

Table 1. Descriptive Inventory of Facility Storage

Tank	Nominal Capacity (gal)	Product Stored	Type	Double Walled?
1,000-gal Main Facility Diesel Generator AST	1,000	Diesel	Steel	Yes
225-kVa Transformer	161	Oil	Rectangular Steel	No
55-gal Used Oil Drum	55	Used Oil	Steel Drum	No[a]
200-gal Diesel Generator AST	200	Diesel	Rectangular Steel	No[a]
200-gal Diesel Generator AST	200	Diesel	Rectangular Steel	No[a]
30-gal Generator Day Tank	30	Diesel	Rectangular Steel	No[a]
30-gal Dielectric Fluid Tank	30	Dielectric Fluid	Steel Cylinder	No[a]

[a] These tanks have been provided with external secondary containment. In each case, except for the used oil drum, the building housing the tank serves as the secondary containment.

PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL

This section discusses design components and operational procedures for spill prevention and control at the facility.

A. TANK AND SYSTEM DESIGN FOR SPILL PREVENTION

This section describes design components and operating procedures for preventing oil spills. The facility will review the design and operational procedures contained in this section and implement those that are not currently in place.

1. Aboveground Storage Tanks

WFO AST: AST construction will be compatible with the No. 2 diesel fuel held by the tank. The AST will have secondary containment around the primary tank shell. A level gauge or dip-stick indicates the fuel level (from empty to full).

An automatic shut-off valve on the fill spout will be set to close at 90% of capacity (900 gal). The AST also will have an audible high-level alarm set at 85% of capacity (850 gal) and an interstitial monitoring device between the primary and secondary tanks that is connected to the audible alarm system. A 10-gal capacity spill container surrounds the fill spout.

Day Tank: This tank will have an open top spill pan (rupture basin) designed to hold 110% of the tank volume. It also will have a liquid-level gauge to indicate the amount of fuel in the tank (empty to full) and a high-level float switch connected to the audible alarm to warn of overfilling. The rupture basin will have a float switch designed to detect fuel that has spilled or leaked. The float switch will be connected to an audible alarm system in the office.

Piping: An anti-siphoning valve is located between the AST and the pump to prevent unwanted fuel from being siphoned from the AST.

Oil-Filled Equipment: Oil-filled equipment used at the facility includes rain gauges, a dielectric fluid tank (for radar system), electrical transformer, and maintenance vehicles. In general, it is not practicable to provide secondary containment for these units because of fire prevention concerns, small quantities used, and mobility of equipment. Secondary containment will be provided where practicable such as the dielectric fluid tank, which is located indoors.

2. Tank Refueling and Truck Unloading Operations

All delivery drivers will have U.S. Department of Transportation hazardous material transportation training as required by federal law. Fuel unloading is not performed during rain events as a further precaution to prevent run-off in the event of a spill.

Procedures to prevent spills during fuel unloading from tank trucks are discussed below. The appropriate form in Appendix A is used to document all refueling activities. Copies of these forms are maintained for 5 years.

a. **Before** fuel delivery and unloading: (Appendix A-2)

i. Determine the available capacity (ullage) of the AST by converting the reading on the fuel gauge to gallons (see Appendix A). Communicate the ullage to the fuel supply contractor and mark in the fueling log.
ii. Move spill containment equipment such as booms, spill barriers, or spill kits into the unloading area.
iii. Chock the tank truck wheels.
iv. Place drip pans under all pump hose fittings (if applicable) before unloading.
v. Ensure the fill nozzle is placed in the appropriate AST filling port.

b. **During** fuel unloading: (Appendix A-2)

i. Remain with or near the vehicle and the fuel tanks at all times during unloading. Continuously monitor gauges on the AST and the truck, as well as the fueling nozzle to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading procedure immediately to ensure fuel ullage is not exceeded.

c. **After** fuel unloading: (Appendix A-2)

i. Record the amount of fuel transferred to the AST in the log (Appendix A-1).
ii. Drain the fill hose and then ensure that all drain valves are closed (if applicable) before removal of the hose from the tank.
iii. Pour any uncontaminated fuel in the drip pans, tank truck containment pool, or spill pipe spill bucket container into the AST (if it has the capacity) or dispose of appropriately.
iv. Inspect the tank truck before removing the chocks to ensure the lines have been disconnected from the tank.
v. Remove the chocks from truck wheels.
vi. Place a copy of the completed fuel unloading checklist in the SPCC Plan.

3. Inspections and Records

Inspection and Maintenance of Tanks: The AST and day tank will be inspected each time a maintenance technician visits the site, as well as at the regularly scheduled monthly inspections, for any fuel leaks, especially at the tank seams (including the underside of the tank). The outside of exposed piping will also be inspected. Monthly and annual inspections will be documented on the checklists shown in Appendix B-1 and B-2.

Integrity Testing: Integrity testing of the ASTs is required under the new regulations put forth by the U.S. Environmental Protection Agency (EPA). However, manufacturers of shop-built tanks have stated that integrity testing of their tanks is not necessary and that best management practices should be employed instead. EPA has stated, "*for certain smaller, shop-built containers in which internal corrosion poses minimal risk of failure; which are inspected at least monthly;*

and, for which all sides are visible (i.e., the container has no contact with the ground), visual inspection alone might suffice, subject to good engineering practice."

To comply with 40 CFR 112.8(c)6, WFO Morristown observes generator tests, conducts regular monthly and annual inspections, and recommends integrity testing only when it is warranted (e.g., noticeable leakage or corrosion). Testing will also be conducted if the structural integrity comes into question as a result of a fire, earthquake, or other similar event.

Recordkeeping: The Environmental/Safety focal point or Maintenance Technician (person responsible for spill prevention at the facility) will complete (1) Ullage Logs and documentation of fuel unloading procedures, (2) Records of Inspections, (3) Training Record, and (4) Spill Response Record. These records are maintained for at least 5 years from the time of the recorded action.

4. Site Security

The WFO AST is not enclosed in fenced area; however the facility is manned 24 hours/day, 365 days/year, and security cameras are strategically placed around the facility. All buildings are kept locked. The RDA and associated buildings *are* in a fenced compound that is also kept locked. The exterior of the entire facility is lighted at night.

Signs are posted on and around the ASTs warning of the presence of a combustible liquid, that the combustible liquid is diesel fuel, and that smoking is prohibited near the ASTs. Fire extinguishers are located in the generator buildings. There is no vehicular traffic near the ASTs.

5. Training

As a minimum, the Environmental/Safety focal point, an alternate, and the designated person (MIC, HIC, or OIC) are trained in the intent of applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous sections. SPCC is included in the training. An outline for the training is provided in Appendix C.

Training will be repeated once a year. All new personnel responsible for implementing this SPCC Plan are properly trained before beginning work at the new position. A record of who is trained when, and by whom (Appendix C), will be filed with this SPCC Plan and kept for a period of 5 years.

B. SPILL CONTROL

This section describes control measures for preventing spilled oil from entering navigable waters or adjoining shorelines.

1. Secondary Containment Designs, Construction Material, and Volume

1,000-gal Main Facility Diesel Generator AST

The 1,000-gal main facility diesel generator AST is a double-walled tank with interstitial monitoring. It is equipped with a fill gauge, fill alarm, and a 10-gal spill container surrounding the fill spout. The piping leading into the Generator Building is equipped with secondary containment up to the point of entering the building. The building serves as the secondary containment for the remainder of the piping leading to the 30-gal generator day tank. The building also serves as the secondary containment for the day tank. The entrance threshold to the generator building is not curbed; therefore, the potential exists for a spill to exit the building at the doorway.

225-kV Transformer

The 225-kVa transformer does not have secondary containment because of fire hazards. In the event of failure, the power company would be contacted, the transformer de-energized, and spill response equipment stored adjacent to the transformer used to contain the spill.

55-gal Used Oil Drum

The used oil drum is stored in a purchased containment system constructed from high-density plastic. A 55-gal drum of used absorbents and a 25-gal drum of spent aerosol cans are also stored in the containment system. The capacity of the system is 66 gal.

200-gal Diesel Generator ASTs

The two 200-gal diesel generator ASTs in the Radar Generator Building are single-walled tanks equipped with a fuel level sensor indicating the fuel level as a percentage. The tanks themselves are located inside the building; therefore, the building serves as the secondary containment for the ASTs. The entrance threshold to the Radar Generator Building is curbed to prevent a potential spill from exiting the building at the doorway.

30-gal Dielectric Fluid Tank

The 30-gal dielectric fluid tank is a single-walled tank. The tank is located inside the RDA Building; therefore, the building itself serves as the secondary containment for the tank. The entrance threshold to the RDA Building is not curbed; therefore, the potential exists for a spill to exit the building at the doorway. Due to the size of the building and the small capacity of the tank, it is highly unlikely that a spill would exit the building.

2. Spill Kits Type and Location

Two 70-gal Pig spill kits are located across the driveway to the east of the Generator Building and beside the used oil storage area. The kits include oil absorbent socks and mats in a polyethylene container that doubles as a disposal container. The location of the spill kits is

quickly accessible for all storage locations. In addition, one roll of Pig spill mats is located inside the Generator Building.

3. Personal Protective Equipment

If a leak or spill were to occur, it might be necessary for NWS personnel to conduct initial emergency procedures to minimize the impact of the spill, control the spill, or secure the area. To employ the SWIMS procedure (see Part III.A of this plan), it may be necessary for them to come into contact with the diesel fuel. If this were to occur, NWS personnel will use proper personal protective equipment (PPE). Proper PPE for diesel fuel is specified in the Material Safety Data Sheet (Appendix F).

- Eye protection is accomplished by the use of **chemical goggles** or a **full-face shield**. An **eyewash station** should be provided in the area.
- Hand protection is accomplished by the use of **nitril gloves** and should be worn at all times when handling this material. If there is a likelihood of skin exposure, then impervious clothing such as **Tyvek** should be worn.
- Other clothing and equipment, if contaminated, must be removed and laundered before reuse. Items that cannot be laundered should be discarded.

PART III - SPILL COUNTERMEASURES AND REPORTING SPILL COUNTERMEASURES

A. SPILL COUNTERMEASURES

This section presents countermeasures to contain, clean up, and mitigate the effects of any oil spills at this site.

1. SWIMS

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasures will be undertaken until conditions are safe for workers. The SWIMS procedure provides countermeasures.

S - Stop the leak and eliminate ignition sources.

a. Attempt to seal or stop leak if it can be done safely.
b. Attempt to divert flow away from any drainage ditch, storm sewer, or sanitary sewer with a spill barrier or the contents of spill kit. The spill kit is located in the Generator Building.
c. Eliminate all ignition sources in the immediate area.

W - Warn others.

a. Yell out "SPILL." Inform the person in charge at the facility.
b. Account for all personnel and ensure their safety.
c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.

I - Isolate the area.

a. Rope off the area

M- Minimize exposure to the spilled material by use of appropriate clothing and protective equipment. If possible, remain upwind of the spilled material.

S- Stand by to assist the emergency response contractor.

B. SPILL REPORTING

This section discusses the reporting procedures for spills of diesel fuel and oil at the facility. The people and organizations that are notified vary, based on the quantity of the spill, whether it reaches navigable waters or adjoining shorelines, the frequency and history of spills, and the potential impacts that the spill may have on people, property, or the environment.

Appendix D contains a spill report form for recording the information to be reported to all agencies in writing (to the extent known). The NWS Environmental Compliance Officer and the NOAA Mountain Regional Compliance Officer (see next section) receive copies of the completed form.

1. General Notification Procedures for All Spills

- Call 911 (or the local emergency agency) if there is an immediate emergency.
- Notify the appropriate persons within the NWS and NOAA:
  - **Mark George, RECO for the Mountain Region (817) 978-2644 x139**
  - **Terry Brisbin, Environmental/Safety Coordinator (303) 497-3064**
  - **Mike Jacob, NWS Environmental Compliance Officer (301) 713-1838 x165**
  - **Olga Kebis, NWS Safety Officer (301) 713-1838 x173**

2. Federal Notifications

The federal Clean Water Act, as described in 40 CFR 110.6, requires notifying the EPA National Response Center or the U.S. Coast Guard as soon as anyone has knowledge of any discharge of oil in quantities that "may be harmful." 40 CFR 110.3 defines "may be harmful" as a discharge if either of the following applies:

- Violates applicable water quality standards.

or

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

If either of these criteria is met, contact the following:

National Response Center	**(800) 424-8802**
EPA Region 4 Spill Reporting	**(404) 562-8700**

Additionally, in accordance with the SPCC regulations in 40 CFR 112.4(a), submit a report to the EPA Regional Administrator within 60 days if either of the following two spill criteria occurs:

- A discharge of more than 1,000 gal of oil into or upon navigable waters or adjoining shore lines in a single event or
- Two spill events that cause discharge of more than 42 gal in each event, within any 12-month period.

Refer to 40 CFR 112.4(a) for instructions on the required contents of the report and proper reporting procedures.

Diesel fuel and oil are not listed as a hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act; therefore, no other notification to EPA is required for discharges of diesel fuel and oil other than those listed previously.

3. State Notifications

The State of Tennessee does not have state-specific regulations governing ASTs. Upon notifying EPA Region 4 that a spill of a reportable quantity has occurred, EPA personnel contact the Tennessee Emergency Management Agency (TEMA) and notify them of the spill. TEMA may also be contacted directly to request assistance.

- **Tennessee Emergency Management Agency (800) 262-3300**

Note: Tennessee has not established reportable quantity thresholds. However, in general, the Local Emergency Planning Commission *prefers* to be contacted any time a spill of 5 gal or more enters the environment. This is not a state requirement.

If needed, additional state assistance is available from the Tennessee Highway Patrol.

- **Tennessee Highway Patrol (615) 251-5175**

4. Local Contacts and Notifications

- **Fire Department 911**
- **Local Emergency Planning Commission (423) 586-5072**

5. Cleanup Contractor Notification

The following cleanup and environmental consulting contractors would be able to assist WFO Knoxville/Tri-Cities in the event of a spill emergency:

Safety-Kleen Corporation
6617 Pleasant Ridge Road
Knoxville, TN 37921
Phone: (865) 947-9471

Combs Industrial Services, Inc.
1501 Baptist World Center Drive
Nashville, TN 37207
(4-hour response time)
Phone: (800) 678-3623
Page/Cell: (615) 207-8548
Page/Cell: (615) 394-3120
Page/Cell: (615) 394-7265

Ferguson Harbor
Johnson City, TN
Phone: (423) 477-4995

Hepaco of Knoxville
Knoxville, TN
Phone: (800) 888-7689

PART IV - RECOMMENDED IMPROVEMENTS

In accordance with 40 CFR 112.7, this section presents physical upgrades or procedural changes that are not yet fully operational but are called for in the plan.

A. PHYSICAL UPGRADES

The ASTs, piping system, alarm system, and spill response equipment satisfy all current federal and State of Tennessee requirements and are in good operating condition. However, the following changes and upgrades are recommended:

- Provide secondary containment for the refueling truck when practicable. Until that time, employ best management practices (see below). There are a number of secondary containment options available, including several types of temporary drive-on berm systems. Another simple option includes installing asphalt berms at the fueling site with properly engineered, and controllable, drainage systems. Any engineered system would require the approval of a licensed engineer.
  Note: Currently, industry has requested that EPA redefine the term "loading/unloading rack" [40 CFR 112.7(h)]. It is possible that a change in this definition could exempt a facility from providing secondary containment for fuel trucks during fuel delivery for on-site consumption.
- Seal the floor/wall seam of the Radar Generator Building.
- Provide a rupture basin for the main facility generator day tank.
- Provide a minimum 1-in. threshold for the Generator Building entrance and the RDA Building entrance.
- The secondary containment provided for the fuel pipe between the AST and generator building [i.e., polyvinyl chloride (PVC) sheathing] could be more problematic than protective. It is likely that it will create a moist corrosive environment for the pipe and it prevents visual inspections of the pipe. However, it is recognized that leaks from the primary pipe could be detected through routine inspections of the PVC secondary containment pipe where it enters the overfill catch basin on top of the tank. It is also recognized that any leakage in the primary pipe would be retained as long as the secondary pipe remained sound. It is therefore recommended that the PVC sheathing be retained; however, it would be better if the sheathing were replaced with clear PVC piping so that the primary piping may be routinely inspected for corrosion.

B. PROCEDURAL CHANGES

The following procedures and/or procedural changes are recommended:

- Due to the lack of secondary containment for the fuel truck, it is strongly recommended that proper procedures be diligently followed during refueling operations as prescribed in Part II.A.2 and Appendix A of this plan.
- Perform all inspections as outlined in Part II.A.3 and Appendix B of this plan.
- Maintain a training program for all relevant personnel on an annual basis and when new personnel report to the facility as prescribed in Part II.A.5 and Appendix C of this plan.

- Conduct spill exercises annually as prescribed in Part II.A.5 and Appendix D of this plan.

1. Inspections and Preventative Maintenance

The inspection checklists found in Appendix B should be used. The interstitial monitoring device in the AST is designed to monitor the integrity of the primary tank. Visual inspections of the outside of the secondary wall of the AST and the primary wall of the day tank will serve to signal a potential problem with the tank integrity.

Table 2. Potential Spill Sources and Volumes

Source	Event	Potential Spill Volume (gal)	Estimated Rate (gal/minute)	Direction of Spill Flow	Remarks
1,000-gal Main Facility Diesel Generator AST and 30-gal Generator Day Tank	Overfilling or a ruptured hose during fueling	0 to 40[a]	80[b]	Into the surrounding grass/dirt substrate, east across the paved driveway, then downhill into an adjacent parking lot.	Spills of this nature would largely be contained on the paved area or in the grassy areas adjacent to the pavement.
	Failure of fuel supply line to pump	0 to 1000[c] 0 to ~30[d]	Variable depending on the nature of the failure	Same as above; except in the case of failure inside the generator room. A spill of this nature would go onto the floor of the space and then east out the doorway, then into the grass/dirt substrate.	Can be minimized through routine inspections especially during operations.
	Structural failure	0 to 1000[c] 0 to ~30[d]	Variable depending on the nature of the failure	Same as above.	Low probability event that both primary and secondary containment would fail.
	Vehicle collision	0 to 1000[c] 0 to ~30[d]	Variable depending on the damage	Same as above.	Very low probability. There is no vehicular traffic near the AST and the day tank is in the building.
	Overturn or puncture in an earthquake	0 to 1000[c] 0 to ~30[d]	Variable depending on the nature of the damage	Same as above.	Low probability. Morristown is in a low-risk earthquake zone.
	Failure of the pump to shut down after filling the day tank or failure of the line from pump to day tank	0 to 1000	Variable depending on the nature of the failure	Same as above.	Can be minimized through routine inspections and maintenance. A fuel return line is installed to allow fuel to return to the AST in the event that the transfer pump does not shut down.
	Structural failure or vandalism	0 to 1000[c] 0 to ~30[d]	Variable, depending on the extent of damage	Same as above.	Can be minimized through routine inspections, maintenance, and by the adherence to good security practices.
225-kV Transformer	Structural failure	0 to 161	NA	Into the surrounding grassy area.	Spills of this nature would largely remain in the grassy area around the transformer.
	Overfilling	0 to 5	<10	Into the surrounding grassy area.	Spills of this nature would largely remain in the grassy area around the transformer.
55-gal Used Oil Drum	Structural failure	0 to 55	NA	Into the secondary containment of the storage unit.	Can be minimized through routine inspections.
	Overfilling	0 to 1	<2	Into the secondary containment of the storage unit.	Low probability of a spill of this nature entering the environment due to secondary containment.

Table 2. Potential Spill Sources and Volumes (cont.)

Source	Event	Potential Spill Volume (gal)	Estimated Rate (gals per minute)	Direction of Spill Flow	Remarks
Two 200-gal Diesel Generator ASTs and 30-gal Generator Day Tank	Overfilling or a ruptured hose during fueling	0 to 40[a]	80[b]	Into the secondary containment of the building, and into the surrounding gravel area, depending on location of the rupture.	Overfilling spills would largely remain inside the generator building. Spills from a hose rupture could enter the gravel area surrounding the building.
	Failure of fuel supply line to pump	0 to 200[c]	Variable depending on the nature of the failure	Into the secondary containment of the building.	Can be minimized through routine inspections especially during operations.
	Failure of the pump to shut down after filling the day tank or failure of the line from pump to day tank	0 to 400[c]	Variable depending on the nature of the failure	Same as above.	Can be minimized through routine inspections and maintenance. A fuel return line is installed to allow fuel to return to the AST in the event that the transfer pump does not shut down.
	Structural failure	0 to 400[c]	Variable depending on the nature of the failure	Into the secondary containment of the building.	Low probability event that both primary and secondary tank shells would fail. Can be minimized by routine inspections.
	Earthquake damage	0 to 400[c]	Variable depending on the nature of the damage	Into the secondary containment of the building.	Low probability. Morristown is in a low-risk earthquake zone. However, in the event of severe earthquake damage, the integrity of the secondary containment could be compromised.
	Structural failure or vandalism	0 to 400[c]	Variable, depending on the extent of damage	Into the secondary containment of the building.	Can be minimized through routine inspections, maintenance, and by the adherence to good security practices.
30-gal Dielectric Fluid Tank	Overfilling or a ruptured hose during filling	0 to 30	80[b]	Into the secondary containment of the building, and potentially into the surrounding gravel area.	Overfilling spills would largely remain inside the RDA building.
	Structural failure	0 to 30	Variable depending on the nature of the failure	Into the secondary containment of the building.	Spills of this nature would largely remain in the RDA building.

[a] Based on a maximum pumping rate of 80 gal/minute from the fill truck and a maximum of 30 seconds to turn off the pump.
[b] Approximate maximum pumping rate of fill truck.
[c] Steel, 1000-gal tank mounted outside on a concrete pad.
[d] One rectangular steel day tank mounted in a catch basin under the generator.

APPENDIX A

A-1 TANK ULLAGE AND FUELING LOG

A-2 FUEL UNLOADING PROCEDURE CHECKLIST

APPENDIX A-1

TANK ULLAGE AND FUELING LOG

Station Name: _____

Tank Capacity: _____ (gallons)

Date	Initials	Gauge Reading	Initial Volume of Fuel in Tank[a]	Available Capacity or Ullage[b] (gal)	Quantity Added (gal)	Comments

Notes: [a] From gauge reading
[b] Available capacity = tank capacity (900 gal) – initial volume of fuel in tank

APPENDIX A-2

FUEL UNLOADING PROCEDURE CHECKLIST

Station Name: _____

Date: _____ **Tank:_____**

NWS Rep: _____ **Supplier: _____**

X	Item	Description	Comments
The following six items must be completed BEFORE fuel unloading:			
	1	Ensure the audible high-level alarm system and automatic shutoff valve are functioning properly.	
	2	Determine the available capacity (ullage) of the AST by converting the reading on the fuel gauge to gallons (see Appendix A-1). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	3	Move spill containment equipment such as booms or spill barriers into the unloading area.	
	4	Block the wheels of the tank truck.	
	5	Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the AST and before unloading.	
	6	Ensure the fill nozzle is in place in the appropriate AST appurtenance. In this case, the fill nozzle is placed in the fill pipe connected to the round spill container.	
The following two items must be completed DURING fuel unloading:			
	7	Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading.	
	8	Monitor the gauges on the AST and the truck continuously to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading of fuel immediately.	
The following six items must be completed AFTER fuel unloading:			
	9	Record the amount of fuel unloaded in the log (Appendix A-1).	
	10	Before removing the fill hose from the AST, ensure that it is drained and that all drain valves are closed (if applicable).	
	11	Pour any fuel in the drip pans, tank truck containment pool, or spill container on the fill pipe into the AST (if it has the capacity) or dispose of appropriately (describe how it was disposed of, if applicable).	
	12	Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the AST.	
	13	Remove the blocks from the tank truck wheels.	
	14	Place a copy of this fuel unloading checklist in the SPCC Plan folder.	

Additional Comments Below:

APPENDIX B

B-1 MONTHLY INSPECTION CHECKLIST

B-2 ANNUAL INSPECTION CHECKLIST

APPENDIX B-1

MONTHLY INSPECTION CHECKLIST

Site Name:		**Tank Name or Number:**	
Date of Inspection:		**Inspected by:**	
Date of Last Inspection:		**Signature:**	
A. TANKS	**YES**	**NO**	**NOTES**
Are there any oil stains on the outside of the tank, including the underside?			
Is there any oil on the ground, concrete, or asphalt around the tank?			
Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals? (such as paint peeling or rust spots)			
Are there any raised spots, dents, or cracks on the tank?			
Does it appear that the foundation has shifted or settled?			
Is the fuel gauge working properly?			
Are all vents clear so they may operate properly?			
If rainwater is present in secondary containment area, does sufficient volume remain for spill control? (if applicable)			
B. PIPING	**YES**	**NO**	**NOTES**
Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves?			
Are aboveground piping, hoses, fittings, or valves in good working condition?			
C. SECURITY/SAFETY/SPILL COUNTERMEASURES	**YES**	**NO**	**NOTES**
Are lights working properly to detect a spill at night?			
Are all locks in the "lock" position?			
Are all warning signs properly posted and readable?			
Are vehicle guard posts in place and properly secured? (if applicable)			
Are spill kits easily accessible, protected from the weather, and complete?			

CORRECTIVE ACTIONS REQUIRED (explain below):

APPENDIX B-2

ANNUAL INSPECTION CHECKLIST

Site Name:		**Tank Name or Number:**	
Date of Inspection:		**Inspected by:**	
Date of Last Inspection:		**Signature:**	
A. MONTHLY CHECKLIST	**YES**	**NO**	**NOTES**
Have Monthly Inspection checklists been completed?			
B. TANKS			
Are all alarms and automatic shutoff devices working properly?			
Is interstitial monitor functioning properly? (if applicable)			
C. OTHER			

CORRECTIVE ACTIONS REQUIRED (explain below):

APPENDIX C

C-1 TRAINING OUTLINE

C-2 TRAINING RECORD

APPENDIX C-1

TRAINING OUTLINE:
SPILL PREVENTION, CONTROL, AND COUNTERMEASURES

Training is provided for facility personnel at the following times:

1. System startup or whenever new equipment is installed
2. Within the first week of employment for new personnel
3. Annually

Training includes complete instruction in the elements of the facility's SPCC Plan, including:

1. Pollution control laws, rules, and regulations including a summary of 40 CFR 112, "Oil Pollution Prevention" (see Attachment)

2. Fuel Storage System

   A. Purpose and application of the following system elements:
      - Tanks
      - Piping
      - Pumps
      - Accessory equipment
      - Electronic monitors

   B. Operation, maintenance, and inspection of system elements

3. Spill Prevention

   A. Potential spill sources
   B. Spill flow direction and impact on navigable waters
   C. Procedures to prevent spills, especially during fuel unloading

4. Spill Control

   A. Secondary containment
   B. Safety valves
   C. Pump and equipment shutoff switches
   D. Use of catch basin inlet covers or other diversionary devices

5. Spill Countermeasures

   A. Location and use of emergency phone numbers
   B. Location and use of fire extinguishers
   C. Location and use of spill cleanup kit
   D. Implementing SWIMS procedure

APPENDIX C-2

TRAINING RECORD

NOTE: SPCC TRAINING IS REQUIRED ANNUALLY

Site name: _____

Date of Training	Employee Trained	Trainer	Remarks

APPENDIX D

D-1 SPILL RESPONSE EXERCISE RECORD

D-2 SPILL REPORTING FORM

APPENDIX D-1

SPILL RESPONSE EXERCISE RECORD

NOTE: A SPILL RESPONSE EXERCISE SHALL BE CONDUCTED ANNUALLY AND RECORDED BELOW.

Site name: _____

Date of Exercise	Signature of Environmental Focal Point	Remarks

Guidelines for conducting a "SPILL RESPONSE EXERCISE":

- Review PART III (SPILL COUNTERMEASURES AND REPORTING) of this plan
- Review the information required on the "SPILL REPORTING FORM"
- Verify the telephone numbers shown on the "SPILL REPORTING FORM"
- Record the Date of the Exercise and the Signature of the Environmental Focal Point

APPENDIX D-2

SPILL REPORTING FORM (12/20/04)

1. GENERAL		
Name of Facility:	Address:	
Completed by:	Organization: **National Weather Service**	
Position:	Phone:	
2. SPILL INFORMATION		
Date:	Time:	
Location at Facility:	Quantity:	
Substance Spilled:	Other:	
3. OUTSIDE NOTIFICATIONS		
Agencies	**Recorder at Outside Agency**	**Date and Time**
Call **911** (or the local emergency agency), if there is an immediate emergency.		
NWS/NOAA: **Mike Jacob, (301) 713-1838 ext. 165** **Olga Kebis, (301) 713-1838 ext. 173** **Terry Brisbin, (817) 978-2644 x139** **Mark George, (303) 497-3064**		
EPA National Response Center, or **U.S. Coast Guard: (800) 424-8802**		
List Additional State and Local Agencies below:		
4. INFORMATION ON SOURCE AND CAUSE:		
5. DESCRIPTION OF ENVIRONMENTAL DAMAGE:		
6. CLEANUP ACTION(S) TAKEN:		
7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS:		

Note: - All information must be filled in. If something is unknown, write "unknown."
- Copies must be sent to the NWS/NOAA personnel listed above.

APPENDIX E

CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112 WITH THIS PLAN

APPENDIX E

CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112 WITH THIS PLAN

CFR Citation	Item	Plan Location
112.1(d)(2)(ii)	Criteria for need of an SPCC Plan	Table 1
112.4(a)	Reporting of Spills – Federal Notifications	Part III.B
112.4(c)	Reporting of Spills – State Notifications	Part III.B
112.5(b)	SPCC Plan review and amendment requirements – 5 year max.	Page ii
112.5(c)	PE Certification of Technical Amendments	Page I
112.7	SPCC Plan – full approval by management	Page i; Appendix E
112.7(a)(1)	Discussion of Facility Conformance	Part I.B.6
112.7(a)(3)	Facility Description and Diagrams	Part I.A and B; Appendix K
112.7(a)(3) (i)	Type of Oil and Storage Capacity	Part I.B.7; Table 1
112.7 (a)(3)(ii)	Discharge Prevention Measures	Part II
112.7(a)(3)(iii)	Discharge and Drainage Controls	Parts II and III
112.7(a)(3)(iv)	Countermeasures for Discovery, Response and Cleanup	Part III
112.7(a)(3)(v)	Methods of Disposal	Part III.B.5
112.7(a)(3)(vi)	Contact List and Phone Numbers	Part III.B; Appendix D-2
112.7(a)(4)	Spill Reporting Form	Appendix D-2
112.7(a)(5)	Procedures In Event of Discharge	Part III.A; Appendix D-2
112.7(b)	Flow Prediction Information	Table 2 and Appendix K
112.7(c)	Secondary Containment	Part II.A.1 and A.2
112.7(c)(1)(vii)	Sorbent Materials	Part III.B.2; Appendix G
112.7(d)	Commitment of Manpower and Equipment	Part III.B
112.7(e)	Inspections, Tests and Records	Part II.A.2; Appendix B
112.7(f)	Training	Part II.A.5; Appendix C
112.7(g)(5)	Lighting	Part III.A.4
112.7(j)	State Rules, Regulations and Guidelines	Part III.B
112.8(c)(6)	Container Testing	Part II.A; Appendix B

APPENDIX F

MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name TULSTAR PRODUCTS	Emergency Telephone Number 918/749-9060
Address *(Number, Street, City, State, and ZIP Code)* 2424 E. 21ST ST. SUITE 450 TULSA, OKLAHOMA 74114	Telephone Number for Information 918/749-9060 Date Prepared 7/30/90 Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Propylene Glycol	CAS# 000057-55-6			

Section III — Physical/Chemical Characteristics

Boiling Point 370 F, 188 C		Specific Gravity (H_2O = 1)	1.50@60/60F 16C
Vapor Pressure (mm Hg.) .22 mmhg @ 20C, 68F		Melting Point	N/A
Vapor Density (AIR = 1)	2.62	Evaporation Rate (Butyl Acetate = 1)	

Solubility in Water
Complete

Appearance and Odor
Clear

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) 215 F, 102C/ COC	Flammable Limits	LEL 2.6%/100C	UEL 12.5 @ 130C

Extinguishing Media
Water Fog, Alcohol Foam, Dry Chemical

Special Fire Fighting Procedures

Unusual Fire and Explosion Hazards
Fire and Explosion Hazards: None

ection V — Reactivity Data

ability			
	Unstable		Conditions to Avoid: Stable over normal operating
	Stable	X	Temperature range of -30F -250F

compatibility (*Materials to Avoid*): Oxidizing Material

azardous Decomposition or Byproducts: None

azardous olymerization			
	May Occur		Conditions to Avoid
	Will Not Occur	X	

ection VI — Health Hazard Data

oute(s) of Entry: Inhalation? No Skin? No Ingestion? Single dose oral toxicity is low. LD50 for female rats is about 20.3g/kg.

ealth Hazards (*Acute and Chronic*)

arcinogenicity: NTP? IARC Monographs? OSHA Regulated? Repeated excessive ingestion may cause central nervous systems effects. No carcinogenic effects have been seen in long-term animal studies.

igns and Symptoms of Exposure

Medical Conditions
Generally Aggravated by Exposure: None

Emergency and First Aid Procedures: Eyes- irrigate with water for at least 5 minutes: Skin- Wash off in flowing water: Ingestion- Induce vomiting if large amounts are ingested. Consult Dr.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: Cover with absorbent material. Soak up and sweep into bag.

Waste Disposal Method: Incinerate or bury away from water supplies in accordance with local regulations.

Precautions to Be Taken in Handling and Storing: Exercise reasonable care and caution.

Other Precautions

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)

Ventilation			
	Local Exhaust: Good general ventilation suffic.	Special: N/A	
	Mechanical (*General*): N/A	Other: N/A	

Protective Gloves: No

Eye Protection: Use safety glasses

Other Protective Clothing or Equipment: No precautions other than clean body-covering should be needed

Work/Hygienic Practices: Classified as to SARA TITLE III A delayed health hazard

* U.S.G.P.O.: 1988-491-529/45775

SHELL

MATERIAL SAFETY DATA SHEET

BE SAFE
READ OUR PRODUCT SAFETY INFORMATION ...AND PASS IT ON (PRODUCT LIABILITY LAW REQUIRES IT)

24 HOUR EMERGENCY ASSISTANCE	GENERAL MSDS ASSISTANCE
CHEMTREC: 800-424-9300	SHELL: 713-241-4819 1-800-240-6737

ROTELLA(R) T 15W-40 WITH ADVANCED SOOT CONTROL SH MSDS: 71630 - 11 T 01/26/98

SECTION I NAME

PRODUCT: ROTELLA(R) T 15W-40 WITH ADVANCED SOOT CONTROL
CHEM NAME: MIXTURE (SEE SECTION II-A)
CHEM FAMILY: PETROLEUM HYDROCARBON; MOTOR OIL
SHELL CODE: 50012

SECTION II-A INGREDIENTS

NO.	COMPOSITION	CAS NO.	PERCENT
P	ROTELLA T 15W-40 WITH ADVANCED SOOT CONTROL	MIXTURE	100
1	HIGHLY REFINED PETROLEUM OIL	MIXTURE*	70-80
2	ADDITIVES CONTAINING:	MIXTURE	20-30
2A	ZINC COMPOUND	MIXTURE	1-2

MAY CONTAIN: 64742-54-7
NFPA HAZARD RATING: HEALTH 0 FIRE 1 REACTIVITY 0

SECTION II-B ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
1	>5.0 G/KG (RAT)*	>5.0 G/KG (RABBIT)*	NOT AVAILABLE

* BASED ON API STUDIES

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT: LUBRICATING OILS ARE GENERALLY CONSIDERED NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT: LUBRICATING OILS ARE GENERALLY CONSIDERED NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION: INHALATION OF VAPOR (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST FROM THIS PRODUCT MAY RESULT IN MILD IRRITATION OF THE UPPER RESPIRATORY TRACT.

INGESTION: LUBRICATING OILS ARE GENERALLY CONSIDERED NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE.

AGGRAVATED MEDICAL CONDITIONS:
PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

OTHER HEALTH EFFECTS:
THIS PRODUCT AND ITS COMPONENTS ARE NOT CLASSIFIED AS CARCINOGENS BY INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), NATIONAL TOXOCOLOGY PROGRAM (NTP) OR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAS DETERMINED THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY IN EXPERIMENTAL ANIMALS OF USED MOTOR OILS. HANDLING PROCEDURES AND SAFETY PRECAUTIONS IN THE MSDS SHOULD BE FOLLOWED TO MINIMIZE EMPLOYEE'S EXPOSURE TO THE USED PRODUCT.

FOR A SPANISH TRANSLATION OF THIS MSDS, CALL 1-800-240-MSDS.

SECTION IV OCCUPATIONAL EXPOSURE LIMITS

COMP NO.	OSHA PEL/TWA	PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	OTHER
P	5 MG/M3x	NONE	5 MG/M3x	10 MG/M3x	

xOIL MIST, MINERAL

SECTION V EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. IN GENERAL NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF PRODUCT ARE INGESTED. HOWEVER, GET MEDICAL ATTENTION.

NOTE TO PHYSICIAN: IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

SECTION VI SUPPLEMENTAL HEALTH INFORMATION

NONE IDENTIFIED.

SECTION VII PHYSICAL DATA

BOILING POINT (DEG F):	SPECFIC GRAVITY (H2O = 1):	VAPOR PRESSURE (MM HG):
NOT AVAILABLE	0.8844	<0.1
MELTING POINT (DEG F):	SOLUBILITY IN WATER:	VAPOR DENSITY (AIR = 1):
-25 (POUR POINT)	NEGLIGIBLE	NOT AVAILABLE
		VISCOSITY: 13-15 (CS @ 212 DEG F)

EVAPORATION RATE (NORMAL BUTYL ACETATE = 1):NOT AVAILABLE

APPEARANCE AND ODOR:DARK AMBER OIL. SLIGHT HYDROCARBON ODOR.
PHYS/CHEM PROPERTIES:

SECTION VIII FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD: 380 DEG F (PMCC)
FLAMMABLE LIMITS/PERCENT VOLUME IN AIR: LOWER: N/AV HIGHER: N/AV

EXTINGUISHING MEDIA:
USE WATER FOG, FOAM, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:
MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE-SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE-PRESSURE NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

SECTION IX REACTIVITY

STABLITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, OPEN FLAMES AND OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE, HYDROGEN SULFIDE, AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

SECTION X EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:
IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SECTION IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

PROTECTIVE CLOTHING
WEAR CHEMICAL RESISTANT GLOVES AND OTHER PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT. WEAR SAFETY GOGGLES TO AVOID EYE CONTACT. TEST DATA FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE BEST PROTECTION IS PROVIDED BY NITRILE GLOVES.

ADDITIONAL PROTECTIVE MEASURES:

SECTION XI ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES:
MAY BURN ALTHOUGH NO READILY IGNITABLE. USE CAUTIOUS JUDGMENT WHEN CLEANING UP LARGE SPILLS. xxx LARGE SPILLS xxx WEAR RESPIRATOR AND PROTECTIVE CLOTHING AS APPROPRIATE. SHUT OFF SOURCE OF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIALS; DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. xxx SMALL SPILLS xxx TAKE UP WITH AN ABSORBENT MATERIAL AND DISPOSE OF PROPERLY.

SECTION XII SPECIAL PRECAUTIONS

MINIMIZE SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. PROPERLY DISPOSE OF CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, THAT CANNOT BE DECONTAMINATED.

STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

SECTION XIII TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
NOT HAZARDOUS BY D.O.T. REGULATIONS

DOT PROPER SHIPPING NAME:

OTHER REQUIREMENTS:

SECTION XIV OTHER REGULATORY CONTROLS

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82, THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE ATTACHED ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV STATE REGULATORY INFORMATION

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PROD UCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE AP PLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YO U SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NO	PERCENT	STATE CODE
ZINC COMPOUND	NONE	1-2	CT, FL, IL, LA, MA, NJ, PA, RI

CA = CALIFORNIA HAZ. SUBST. LIST; CA65C, CA65R, CA65C/R = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT OF 1986 OR PROPOSITION 65 LIST; CT = CONNECTICUT TOXIC. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ. SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.

SECTION XVI SPECIAL NOTES

PRODUCT NAME CHANGED; FORMERLY ROTELLA(R) T MULTIGRADE 15W-40 WITH XLA.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPOSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

BE SAFE. READ OUR PRODUCT
SAFETY INFORMATION...AND
PASS IT ON. (PRODUCT
LIABILITY LAW REQUIRES IT)

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4320
HOUSTON, TX. 77210

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x x x x x x x E N V I R O N M E N T A L D A T A S H E E T x x x x x x x

PRODUCT NAME: ROTELLA(R) T 15W-40 WITH ADVANCED SOOT CONTROL

SH EDS: 71630 - 05 01/26/98

SECTION I ¦ PRODUCT COMPOSITION

NO.	COMPOSITION	CAS	PERCENT
P	ROTELLA T 15W-40 WITH ADVANCED SOOT CONTROL	MIXTURE	100
1	HIGHLY REFINED PETROLEUM OIL	MIXTURE*	70-80
2	ADDITIVES CONTAINING:	MIXTURE	20-30
2A	ZINC COMPOUND	MIXTURE	1-2

* MAY CONTAIN: 64742-54-7

SECTION II ¦ SARA TITLE III INFORMATION

NO.	EHS RQ (*1)	EHS TPQ (*2)	SEC-313 (*3)	313 CATEGORY (*4)	311/312 CATEGORY (*5)
2A			YES	ZINC COMPOUND	

*1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
*3 = TOXIC CHEMICAL, SEC 313
*4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.65 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
*5 = CATEGORY (FOR AGGREGATE REPORTING REQUIREMENTS UNDER SARA 311, 312)
HEALTH: H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD
H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL: P-3 = FIRE HAZARD
P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD

SECTION III ¦ ENVIRONMENTAL RELEASE INFORMATION

THIS PRODUCT IS COVERED BY EPA'S COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) PETROLEUM EXCLUSION. THEREFORE, RELEASES TO AIR, LAND, OR WATER ARE NOT REPORTABLE UNDER CERCLA ("SUPERFUND"). HOWEVER, UNDER SECTION 311 OF EPA'S CLEAN WATER ACT (CWA), THIS PRODUCT IS CONSIDERED AN OIL. AS SUCH, SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.
THIS PRODUCT IS AN OIL UNDER 49 CFR (DOT) PART 130. IF SHIPPED BY RAIL OR HIGHWAY IN A TANK WITH A CAPACITY OF 3,500 GALLONS OR MORE, IT IS SUBJECT TO THE REQUIREMENTS OF PART 130. MIXTURES OR SOLUTIONS IN WHICH THIS PRODUCT IS PRESENT AT 10% OR MORE MAY ALSO BE SUBJECT TO THIS RULE.

SECTION IV ¦ RCRA INFORMATION

IF THIS PRODUCT BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE BY RCRA CRITERIA (40 CFR 261). PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

SHELL OIL COMPANY
P.O. BOX 4320
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 473-9461
CHEMTREC: (800) 424-9300

SHELL DIALA(R) OIL AX

68702 69702 68745 02/23/93

SHELL MATERIAL SAFETY DATA SHEET
BE SAFE. READ OUR PRODUCT SAFETY INFORMATION ... AND PASS IT ON.
PRODUCT LIABILITY LAW REQUIRES IT!

********** **MATERIAL SAFETY DATA SHEET 60030 - 09** **********

SHELL DIALA(R) OIL AX SH MSDS: 60030 - 09 T 02/23/93

MANUFACTURER'S NAME AND ADDRESS
SHELL OIL COMPANY
PRODUCT SAFETY & COMPLIANCE
P.O. BOX 4320
HOUSTON, TX 77210

TELEPHONE NUMBERS:
24 HOUR EMERGENCY ASSISTANCE
SHELL: 713-473-9461 CHEMTREC: 800-424-9300

GENERAL MSDS ASSISTANCE
SHELL: 713-241-4819

SECTION I | NAME

PRODUCT: SHELL DIALA(R) OIL AX
CHEM NAME: MIXTURE (SEE SECTION II-A) ACUTE HEALTH HAZARD: 1
CHEM FAMILY: PETROLEUM HYDROCARBON; INDUSTRIAL DIELECTRIC OIL FIRE HAZARD: 1
SHELL CODE: 68702 69702 68745 69704 REACTIVITY: 0

SECTION II-A | PRODUCT/INGREDIENT

NO.	COMPOSITION	CAS	PERCENT
P	SHELL DIALA OIL AX	MIXTURE	100
1	SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	64742-46-7	30-40
2	SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	60-70
3	BUTYLATED HYDROXY TOLUENE	128-37-0	<0.2

NOTE: DIALA OIL CONTAINS NO DETECTABLE LEVELS (<1 PPM) OF PCB AS MEASURED BY ASTM D4059.

NFPA HAZARD RATING: HEALTH 0 FIRE 1 REACTIVITY 0

SECTION II-B | ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
2	>5 G/KG, RAT	>2 G/KG, RABBIT	NOT AVAILABLE

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICTION (29 CFR 1910.1200).

SECTION III | HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT:
BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING PRODUCT IS PRESUMED TO BE NONIRRITATING TO THE EYES.

SKIN CONTACT:
BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING PRODUCT IS PRESUMED TO BE SLIGHTLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE. RELEASE DURING HIGH PRESSURE USAGE MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION:
INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

INGESTION:
INGESTION OF PRODUCT MAY RESULT IN VOMITING; ASPIRATION (BREATHING OF VOMITUS INTO THE LUNGS) MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN ASPIRATION PNEUMONITIS.

SIGNS AND SYMPTOMS:
IRRITATION AS NOTED ABOVE. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING, LABORED BREATHING AND CYANOSIS (BLUISH SKIN); IN SEVERE CASES DEATH MAY OCCUR. LOCAL NECROSIS IS EVIDENCED BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING INJECTION.

AGGRAVATED MEDICAL CONDITIONS:
PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

OTHER HEALTH EFFECTS:
THIS PRODUCT AND ITS COMPONENTS ARE NOT CLASSIFIED AS CARCINOGENS BY INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), NATIONAL TOXICOLOGY PROGRAM (NTP) OR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

SECTION IV | OCCUPATIONAL EXPOSURE LIMITS

NO.	OSHA PEL/TWA	PEL/CEILING	ACGIH TLV/TWA	TLV/STEL	OTHER
P	5 MG/M3*	NONE	5 MG/M3*	10 MG/M3*	

*OIL MIST, MINERAL

SECTION V | EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: FLUSH EYES WITH WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING/SHOES AND WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. IF MATERIAL IS INJECTED UNDER THE SKIN, GET MEDICAL ATTENTION PROMPTLY TO PREVENT SERIOUS INJURY.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.

NOTE TO PHYSICIAN: IF MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND VOMITING HAS NOT OCCURRED, EMESIS SHOULD BE INDUCED WITH SUPERVISION. KEEP VICTIM'S HEAD BELOW HIPS TO PREVENT ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED.

SECTION VI | SUPPLEMENTAL HEALTH INFORMATION

AMOCO HAS REPORTED TO THE U.S. EPA PURSUANT TO SECTION 8(E) OF TSCA THAT A SAMPLE OF HYDROTREATED MIDDLE DISTILLATE (CAS REGISTRY NUMBER 64742-46-7) APPLIED REPEATEDLY TO THE SKIN OF EXPERIMENTAL ANIMALS OVER THEIR LIFETIME PRODUCED A WEAK TUMORIGENIC RESPONSE IN THE SKIN. THE FULL REFINING/PROCESS HISTORY OF THIS SAMPLE WAS NOT PROVIDED IN AMOCO'S SUBMISSION.

SECTION VII | PHYSICAL DATA

BOILING POINT (DEG F):	SPECIFIC GRAVITY (H2O=1):	VAPOR PRESSURE (MM HG):
>300	0.8833	NOT AVAILABLE
MELTING POINT (DEG F):	SOLUBILITY (IN WATER):	VAPOR DENSITY (AIR=1):
-40 (POUR POINT)	NEGLIGIBLE	NOT AVAILABLE

ADDITIONAL PROTECTIVE MEASURES:

SECTION XI | ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES:
MAY BURN ALTHOUGH NOT READILY IGNITABLE. USE CAUTIOUS JUDGMENT WHEN CLEANING UP LARGE SPILLS. *** LARGE SPILLS *** WEAR RESPIRATOR AND PROTECTIVE CLOTHING AS APPROPRIATE. SHUT OFF SOURCE OF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIALS; DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. *** SMALL SPILLS *** TAKE UP WITH AN ABSORBENT MATERIAL AND DISPOSE OF PROPERLY.

SECTION XII | SPECIAL PRECAUTIONS

MINIMIZE SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. PROPERLY DISPOSE OF CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, THAT CANNOT BE DECONTAMINATED.

VISCOSITY: 12
(CST @ 104 DEG F)

EVAPORATION RATE (NORMAL BUTYL ACETATE = 1): NOT AVAILABLE

APPEARANCE AND ODOR: WHITE LIQUID. SLIGHT HYDROCARBON ODOR.

DIELECTRIC STRENGTH: 30 KV (MIN)

SECTION VIII | FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD:
295 DEG F (COC)

FLAMMABLE LIMITS/% VOLUME IN AIR:
LOWER: N/AVA UPPER: N/AVA

EXTINGUISHING MEDIA:
USE WATER FOG, FOAM, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:
MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE-SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE-PRESSURE NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

SECTION IX | REACTIVITY

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, OPEN FLAMES, AND OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

SECTION X | EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:
IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SECTION IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE ATTACHED ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV | STATE REGULATORY INFORMATION

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PRODUCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE APPLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YOU SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NUMBER	PERCENT	STATE CODE
SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	60-70	MA

CA = CALIFORNIA HAZ. SUBST. LIST; CA65 = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT LIST; CT = CONNECTICUT TOX. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.

VOLATILE ORGANIC COMPOUNDS (VOC): THIS PRODUCT IS EXEMPT FROM VOC REPORTING UNDER THE CALIFORNIA CLEAN AIR ACT. SECTION 94510 EXEMPTS ORGANIC COMPOUNDS THAT EITHER HAVE A VAPOR PRESSURE OF <0.1 MM HG @ 20 DEG C OR HAVE MORE THAN 12 CARBON ATOMS.

SECTION XVI | SPECIAL NOTES

MSDS REVISED IN SECTION II-A TO ADD PCB INFORMATION AND SECTION XV TO ADD VOC INFORMATION. A SPANISH TRANSLATION OF THIS MSDS MAY BE OBTAINED BY CALLING 1-800-240-MSDS.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

BE SAFE. READ OUR PRODUCT SAFETY INFORMATION...AND PASS IT ON. (PRODUCT LIABILITY LAW REQUIRES IT)

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4320
HOUSTON, TX. 77210

****************** ENVIRONMENTAL DATA SHEET 60030 - 02 *****************

EDS: 60030 - 02 T 02/23/93

PRODUCT NAME: SHELL DIALA(R) OIL AX
PRODUCT CODE: 68702697026874569704

MANUFACTURER'S NAME AND ADDRESS
SHELL OIL COMPANY
P.O. BOX 4320
HOUSTON, TX 77210

TELEPHONE NUMBERS:
24 HOUR EMERGENCY ASSISTANCE
SHELL: 713-473-9461 CHEMTREC: 800-424-9300

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE
CALL 713-241-2252

SECTION I | PRODUCT COMPOSITION

NO.	COMPOSITION	CAS	PERCENT
P	SHELL DIALA OIL AX	MIXTURE	100
1	SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	64742-46-7	30-40
2	SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	60-70
3	BUTYLATED HYDROXY TOLUENE	128-37-0	<0.2

SECTION II | SARA TITLE III INFORMATION

NO.	EHS RQ* (*1)	EHS TPQ* (*2)	SEC-313 (*3)	313 CATEGORY (*4)	311/312 CATEGORY (*5)

BASED ON THE DATA AVAILABLE TO SHELL THIS PRODUCT IS NOT REGULATED BY SARA, TITLE III

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*1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
*3 = TOXIC CHEMICAL, SEC 313
*4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
*5 = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH: H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD
H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL: P-3 = FIRE HAZARD
P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD

SECTION III | ENVIRONMENTAL RELEASE INFORMATION

THIS PRODUCT IS CLASSIFIED AS AN OIL UNDER SECTION 311 OF THE CLEAN WATER ACT. SPILLS ENTERING (A) SURFACE WATERS OR (B) ANY WATER COURSES OR SEWERS ENTERING/LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER. 800-424-8802.

SECTION IV | RCRA INFORMATION

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

SHELL OIL COMPANY
P.O. BOX 4320
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 473-9461
CHEMTREC: (800) 424-9300

****
THIS MSDS HAS BEEN PROVIDED IN AN ELECTRONIC FORMAT FOR USE IN THE CHEMTREC EMERGENCY RESPONSE PROGRAM AND/OR OTHER APPROVED PROGRAMS. THIS FORMAT MAY CONTAIN BLANKS WHERE INFORMATION WAS NOT AVAILABLE OR NOT APPLICABLE AND THEREFORE MAY NOT BE FULLY COMPLIANT WITH THE OSHA HAZARD COMMUNICATION STANDARD. IF YOU PURCHASE OR USE THIS SHELL PRODUCT AND HAVE NOT RECEIVED A MSDS FROM SHELL PLEASE CONTACT US AND WE WILL PROVIDE ONE. THIS WILL ENSURE THAT YOU RECEIVE UPDATES OF THIS INFORMATION.
****

SHELL

MATERIAL SAFETY DATA SHEET

BE SAFE
READ OUR PRODUCT SAFETY INFORMATION AND PASS IT ON (PRODUCT LIABILITY LAW REQUIRES IT)

24 HOUR EMERGENCY ASSISTANCE	GENERAL MSDS ASSISTANCE
CHEMTREC: 800-424-9300	SHELL: 713-241-4819 1-800-240-6737

SHELL AUTO DIESEL SH MSDS: 52303 - 08 09/22/97

SECTION I NAME

PRODUCT: SHELL AUTO DIESEL
CHEM NAME: DIESEL OIL
CHEM FAMILY: PETROLEUM HYDROCARBON
SHELL CODE: 31100

SECTION II-A INGREDIENTS

NO.	COMPOSITION	CAS NO.	PERCENT
P	SHELL AUTO DIESEL	MIXTURE	100
1	DIESEL OIL	68334-30-5	100

SECTION II-B ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT: BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING LIQUID IS PRACTICALLY NONIRRITATING TO THE EYES.

SKIN CONTACT: BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING LIQUID IS PRESUMED TO BE MODERATELY IRRITATING TO THE SKIN. PROLONGED OR REPEATED LIQUID CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SEVERE IRRITATION AND DERMATITIS. MAY CAUSE MILD SKIN SENSITIZATION. RELEASE DURING HIGH PRESSURE USAGE MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION: INHALATION OF VAPORS OR MIST MAY CAUSE MILD IRRITATION TO THE UPPER RESPIRATORY TRACT. HIGH CONCENTRATIONS MAY RESULT IN CENTRAL NERVOUS SYSTEM DEPRESSION. INHALATION OF HIGH LEVELS OF MIST MAY RESULT IN CHEMICAL PNEUMONITIS.

INGESTION: INGESTION OF PRODUCT MAY RESULT IN VOMITING; ASPIRATION (BREATHING) OF VOMITUS INTO THE LUNGS MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN ASPIRATION PNEUMONITIS.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE. SKIN SENSITIZATION (ALLERGY) MAY BE EVIDENCED BY RASHES, ESPECIALLY HIVES. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH MAY OCCUR. LOCAL NECROSIS IS EVIDENCED BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING INJECTION. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING, LABORED BREATHING AND CYANOSIS (BLUISH SKIN); IN SEVERE CASES DEATH MAY OCCUR.

AGGRAVATED MEDICAL CONDITIONS:
PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. PREEXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOSURE TO THIS PRODUCT.

OTHER HEALTH EFFECTS:
KIDNEY DAMAGE MAY RESULT FOLLOWING ASPIRATION PNEUMONITIS. THE RESULTS OF ANIMAL BIOASSAYS ON MIDDLE DISTILLATE FUELS SHOW THAT PROLONGED DERMAL CONTACT PRODUCES A WEAK TO MODERATE CARCINOGENIC ACTIVITY.

SEE SECTION VI FOR ADDITIONAL HEALTH INFORMATION.

SECTION IV OCCUPATIONAL EXPOSURE LIMITS

COMP NO.	OSHA PEL/TWA	PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	OTHER
P	x				

x NO OSHA PEL OR ACGIH TLV HAS BEEN ESTABLISHED.

SECTION V EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: FLUSH EYES WITH WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING/SHOES AND WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED. IF MATERIAL IS INJECTED UNDER THE SKIN, GET MEDICAL ATTENTION PROMPTLY TO PREVENT SERIOUS DAMAGE; DO NOT WAIT FOR SYMPTOMS TO DEVELOP.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.

NOTE TO PHYSICIAN: IF MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND VOMITING HAS NOT OCCURRED, EMESIS SHOULD BE INDUCED WITH SUPERVISION. KEEP VICTIM'S HEAD BELOW HIPS TO PREVENT ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED.

SECTION VI SUPPLEMENTAL HEALTH INFORMATION

REPEATED DERMAL APPLICATION OF HIGH LEVELS OF MIDDLE DISTILLATE FUELS IN EXPERIMENTAL ANIMALS HAS PRODUCED EXTREMELY SEVERE IRRITATION TO CORROSIVE ACTION ON THE SKIN. VARYING DEGREES OF LIVER AND KIDNEY DAMAGE WERE NOTED IN THESE STUDIES, INCLUDING CONGESTION, ENLARGEMENT, MOTTLING, AND MULTIFOCAL NECROSIS.

MIDDLE DISTILLATE FUELS HAVE BEEN DEMONSTRATED TO CAUSE CHROMOSOME DAMAGE IN THE IN VIVO RAT BONE MARROW CYTOGENETICS ASSAY, AND MUTAGENIC IN THE L5178Y MOUSE LYMPHOMA ASSAY. BASED ON AN INCREASED INCIDENCE OF VARIOUS TUMORS IN STUDIES WITH LABORATORY ANIMALS, THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH) REGARDS WHOLE DIESEL EXHAUST AS A POTENTIAL OCCUPATIONAL CARCINOGEN.

SECTION VII PHYSICAL DATA

BOILING POINT (DEG F):	SPECFIC GRAVITY (H2O = 1):	VAPOR PRESSURE (MM HG):
450 (APPROX.)	0.8762	NOT AVAILABLE

MELTING POINT (DEG F):	SOLUBILITY IN WATER:	VAPOR DENSITY (AIR = 1):
NOT AVAILABLE	NEGLIGIBLE	>1

EVAPORATION RATE (NORMAL BUTYL ACETATE = 1):NOT AVAILABLE

APPEARANCE AND ODOR:YELLOW LIQUID; STRONG HYDROCARBON ODOR.
PHYS/CHEM PROPERTIES:

SECTION VIII FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD: 130 DEG F (PMCC) MIN.
FLAMMABLE LIMITS/PERCENT VOLUME IN AIR: LOWER: N/AV HIGHER: N/AV

EXTINGUISHING MEDIA:
USE WATER FOG, FOAM, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:
CAUTION. COMBUSTIBLE. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINTED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER. IN THE CASE OF LARGE FIRES, ALSO COOL SURROUNDING EQUIPMENT AND STRUCTURES WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

SECTION IX REACTIVITY

STABLITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

SECTION X EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:
USE A NIOSH-APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134, USE EITHER A FULL-FACE, ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

PROTECTIVE CLOTHING
NO SPECIAL EYE PROTECTION IS ROUTINELY NECESSARY. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WEAR CHEMICAL RESISTANT GLOVES AND OTHER CLOTHING AS REQUIRED TO MINIMIZE CONTACT.

ADDITIONAL PROTECTIVE MEASURES:
USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

SECTION XI ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES:
CAUTION. COMBUSTIBLE. xxx LARGE SPILLS xxx ELIMINATE POTENTIAL SOURCES OF IGNITION. WEAR APPROPRIATE RESPIRATOR AND OTHER PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS AND SEAL TIGHTLY FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE; DISPOSE OF FLUSH SOLUTION AS ABOVE. xxx SMALL SPILLS xxx TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL.

SECTION XII SPECIAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE EVEN LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE; FLASH-FIRE CAN RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE (ONLY) WITH ADEQUATE VENTILATION. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

SECTION XIII TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
COMBUSTIBLE LIQUID, III

DOT PROPER SHIPPING NAME:DIESEL FUEL

OTHER REQUIREMENTS:NA1993, GUIDE 128. PRODUCTS WITH A FLASH POINT OF =/< 141 DEG F. ARE RECLASSIFIED AS A "COMBUSTIBLE LIQUID" AS PER 49 CFR 173.120(B)(2) AND ARE NOT SUBJECT TO REGULATIONS UNDER 49 CFR IF IN A CONTAINER OF 119 GALLON CAPACITY OR LESS WHEN TRANSPORTED BY LAND.

SECTION XIV OTHER REGULATORY CONTROLS

THIS PRODUCT IS LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82, THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV STATE REGULATORY INFORMATION

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PROD UCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE AP PLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YO U SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NO	PERCENT	STATE CODE
DIESEL OIL	68334-30-5	100	NJ, RI, CA65C

CA = CALIFORNIA HAZ. SUBST. LIST; CA65C, CA65R, CA65C/R = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT OF 1986 OR PROPOSITION 65 LIST; CT = CONNECTICUT TOXIC. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ. SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.
CALIFORNIA PROPOSITION 65 FOOTNOTE: CA65C = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. CA65R = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. CA65C/R = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BOTH

CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

SECTION XVI SPECIAL NOTES

THIS MSDS REVISION HAS CHANGES IN SECTION XIII.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPOSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

BE SAFE. READ OUR PRODUCT SAFETY INFORMATION...AND PASS IT ON. (PRODUCT LIABILITY LAW REQUIRES IT)

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4320
HOUSTON, TX. 77210

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x x x x x x x E N V I R O N M E N T A L D A T A S H E E T x x x x x x x

PRODUCT NAME: SHELL AUTO DIESEL SH EDS: 52303 - 01 05/04/94

SECTION I ¦ PRODUCT COMPOSITION

NO.	COMPOSITION	CAS	PERCENT
P	SHELL AUTO DIESEL	MIXTURE	100
1	DIESEL OIL	68334-30-5	100

SECTION II ¦ SARA TITLE III INFORMATION

NO.	EHS RQ (x1)	EHS TPQ (x2)	SEC-313 (x3)	313 CATEGORY (x4)	311/312 CATEGORY (x5)
P					H-1, H-2, P-3

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x1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
x2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302

x3 = TOXIC CHEMICAL, SEC 313
x4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.65 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
x5 = CATEGORY (FOR AGGREGATE REPORTING REQUIREMENTS UNDER SARA 311, 312)
HEALTH: H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD
H-2 = DELAYED (CHRONIC) HEALTH HAZARD
PHYSICAL: P-3 = FIRE HAZARD
P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
P-5 = REACTIVE HAZARD

SECTION III ¦ ENVIRONMENTAL RELEASE INFORMATION

UNDER EPA-CWA, THIS PRODUCT IS CLASSIFIED AS AN OIL UNDER SECTION 311. SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

SECTION IV ¦ RCRA INFORMATION

UNDER EPA - RCRA (40 CFR 261.21), IF THIS PRODUCT BECOMES A WASTE MATERIAL, IT WOULD BE IGNITABLE HAZARDOUS WASTE, HAZARDOUS WASTE NUMBER D001. REFER TO LATEST EPA OR STATE REGULATIONS REGARDING PROPER DISPOSAL.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

SHELL OIL COMPANY
P.O. BOX 4320
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 473-9461
CHEMTREC: (800) 424-9300

APPENDIX G

SPILL CLEANUP KIT INFORMATION

Product Data Sheet

Item Number: KITR202

Item Name: PIG® Spill Kit in a 95-gal Overpak Salvage Drum - MRO refill

Absorbency

61 gal./each (230.9 L/each)

Options Available											
Item #	**Size**	**Color**	**Misc. Features**	**Amount**	**Length**	**Width**	**Height**	**Depth**	**Int. Dia.**	**Ext. Dia.**	**Weight**
KITR202	—	—	—	1 each	—	—	—	—	—	—	89 lb (40.4kg)

Description

Replacement contents for a container with a variety of absorbents for responding to spills of oils, coolants, solvents, and water.

Application

To be used to replace components used in KIT202 and KIT224

Features and Benefits

- Prepackaged/Easy to replace the contents of the original 95 gal (360 L) spill kit (KIT202)
- Variety of absorbents/An assortment of absorbent products to handle non-aggressive spills up to 61 gal (231 L)

Composition

- PIG® BLUE Socks: polypropylene and magnesium aluminosilicate
- PIG® Pillows: polypropylene and cellulose fibers
- PIG® Mats: polypropylene

This product helps you comply with:

Kit Components		
Qty.	**Description**	**Component Refill Item Number**
16	48" PIG® BLUE Socks	4048
10	10' PIG® BLUE Socks	PIG202
60	PIG® Universal Mat Pads	MAT203
8	PIG® Pillows	PIL201
50	PIG® Wipers	WIP310
10	Temporary Disposal Bags and Ties	BAG201-L
1	Emergency Response Guidebook	N/A
1	Instructions	N/A
6	Tamperproof Seals	N/A

Regulatory Citation	Summary
40 CFR 112.7(c)(1)(vii)	Spill Prevention Control and Countermeasures (SPCC) Plans require facilities that have the potential to pollute waterways to have, "appropriate containment and/or diversionary structures or equipment to prevent discharge oil from reaching a navigable water course."

APPENDIX H

PERMITS

This facility is not required to obtain a permit.

APPENDIX I

PHOTOGRAPH LOG AND PHOTOGRAPHS

APPENDIX I

PHOTOGRAPHIC LOG

Photograph Number	Date	Description
1	8/31/04	30-gal Dielectric Fluid Tank
2	8/31/04	1,000-gal Main Facility Diesel Generator AST (facing south)
3	8/31/04	1,000-gal Main Facility Diesel Generator AST (facing southwest)
4	8/31/04	1,000-gal Main Facility Diesel Generator AST (facing west)
5	8/31/04	WFO Main Facility Generator and Day Tank
6	8/31/04	WFO Main Facility Generator and Day Tank
7	8/31/04	WFO Transformer
8	8/31/04	WFO Used Oil Drum and Spill Kit
9	8/31/04	WFO Used Oil Drum – View of Interior
10	8/31/04	200-gal Diesel Generator ASTs
11	8/31/04	200-gal Diesel Generator ASTs and Generator
12	8/31/04	200-gal Diesel Generator AST Detail
13	8/31/04	RDA Building and Surrounding Area
14	8/31/04	Drainage Pathway to the East of the 1,000-gal Main Facility Diesel Generator AST
15	8/31/04	Hillside to the East–Drainage Pathway
16	8/31/04	RDA Fenced Compound
17		Driveway Running East of Main Generator Building and Leading to the RDA Area

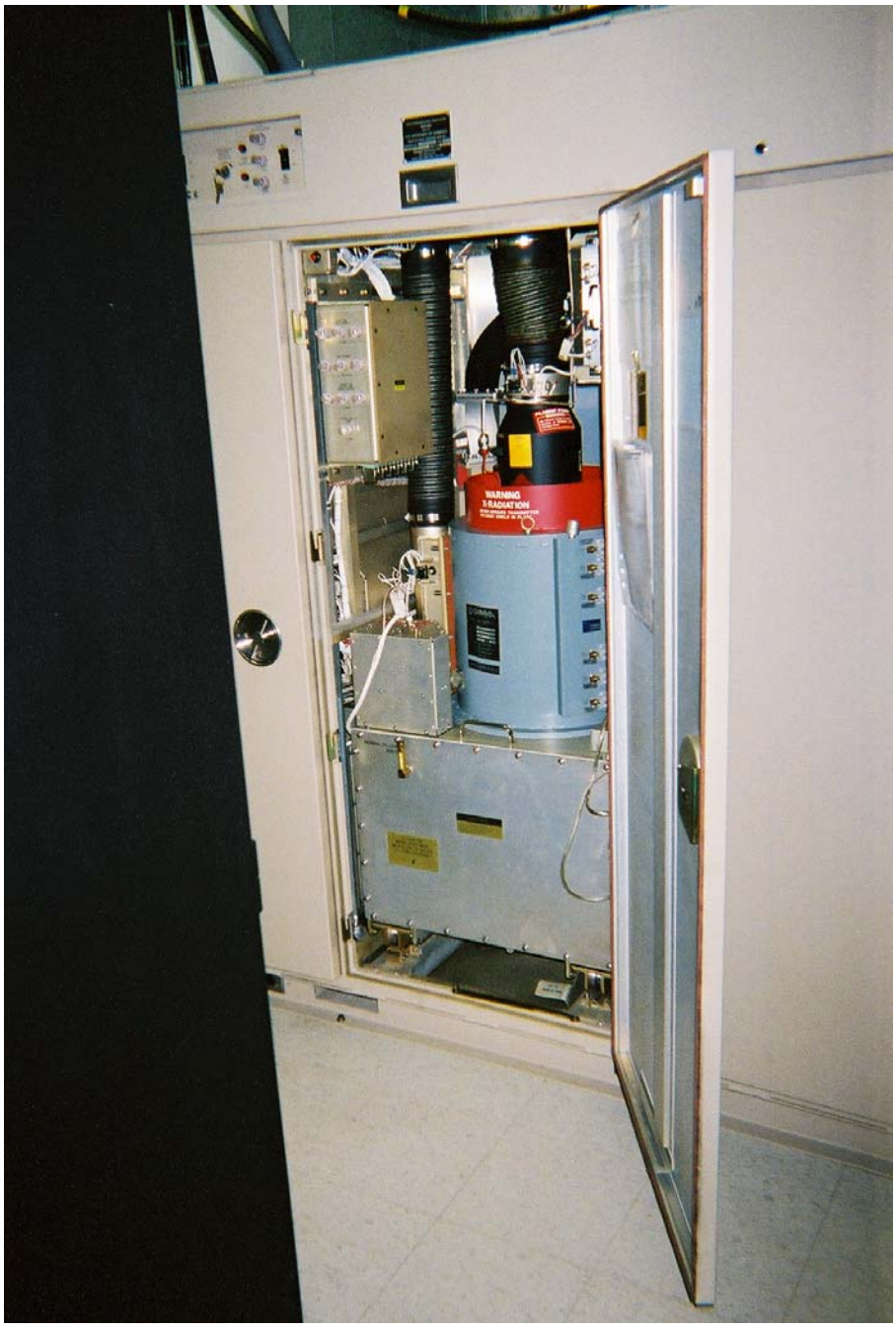

Photo 1. 30-gal Dielectric Fluid Tank

Photo 2. 1,000-gal Main Facility Diesel Generator AST (facing south)

Photo 3. 1,000-gal Main Facility Diesel Generator AST (facing southwest)

Photo 4. 1,000-gal Main Facility Diesel Generator AST (facing west)

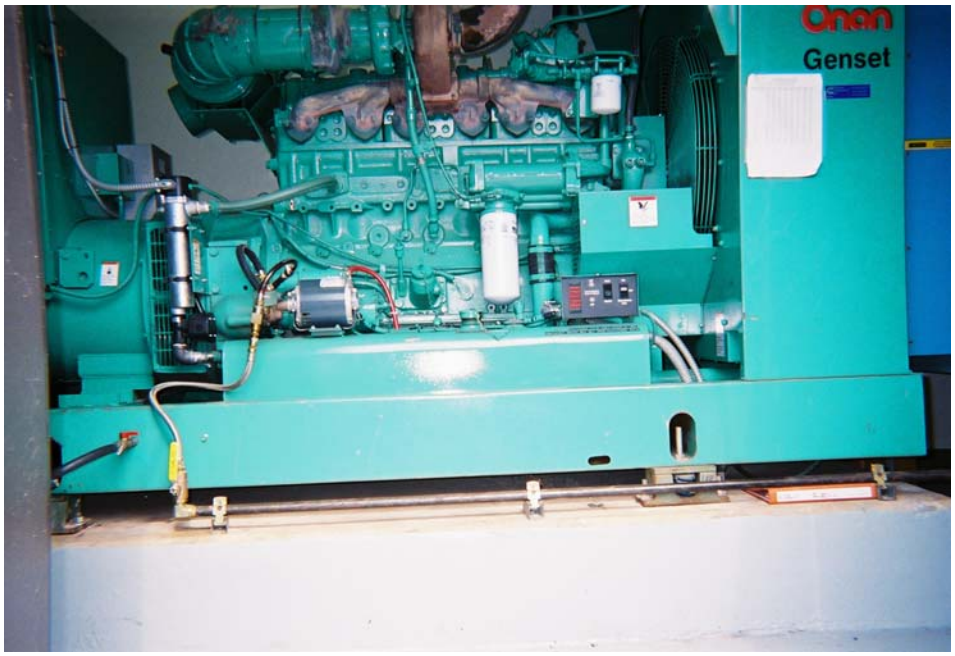

Photo 5. WFO Main Facility Generator and Day Tank

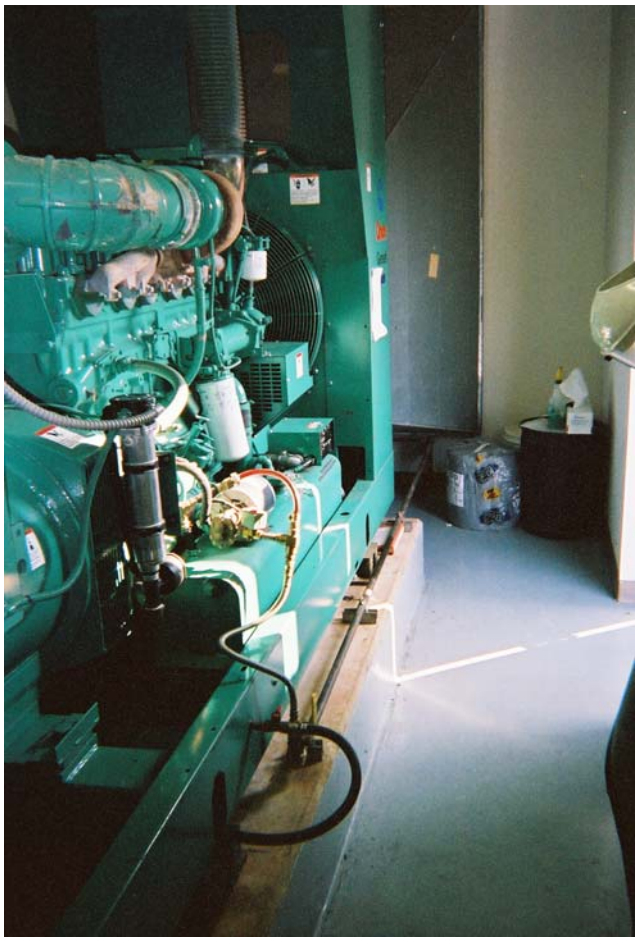

Photo 6. WFO Main Facility Generator and Day Tank

Photo 7. WFO Transformer

Photo 8. WFO Used Oil Drum and Spill Kit

Photo 9. WFO Used Oil Drum – View of Interior

Photo 10. 200-gal Diesel Generator ASTs

Photo 11. 200-gal Diesel Generator ASTs and Generator

Photo 12. 200-gal Diesel Generator AST Detail

Photo 13. RDA Building and Surrounding Area

Photo 14. Drainage Pathway to the East of the 1,000-gal Main Facility Diesel Generator AST

Photo 15. Hillside to the East–Drainage Pathway

Photo 16. RDA Fenced Compound

Photo 17. Driveway Running East of Main Generator Building and Leading to the RDA Area

APPENDIX J

FIGURE 1 MAP OF AREA

FIGURE 2 SITE DRAWING

FIGURE 3 DETAIL OF NEXRAD

FIGURE 4 WFO AST AND GENERATOR DIAGRAM

FIGURE 5 TOPOGRAPHIC MAP

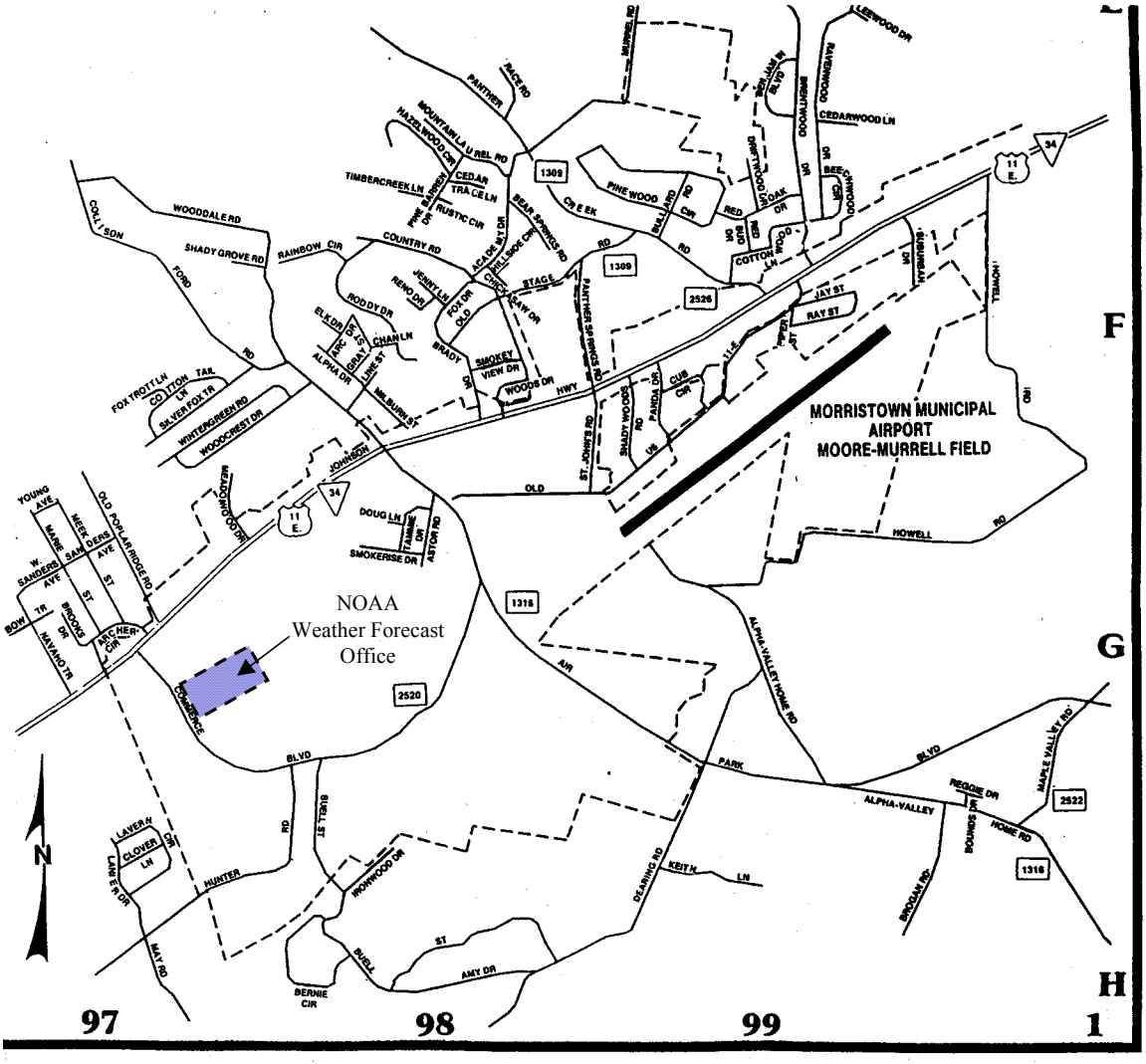

Figure 1. Map of Area

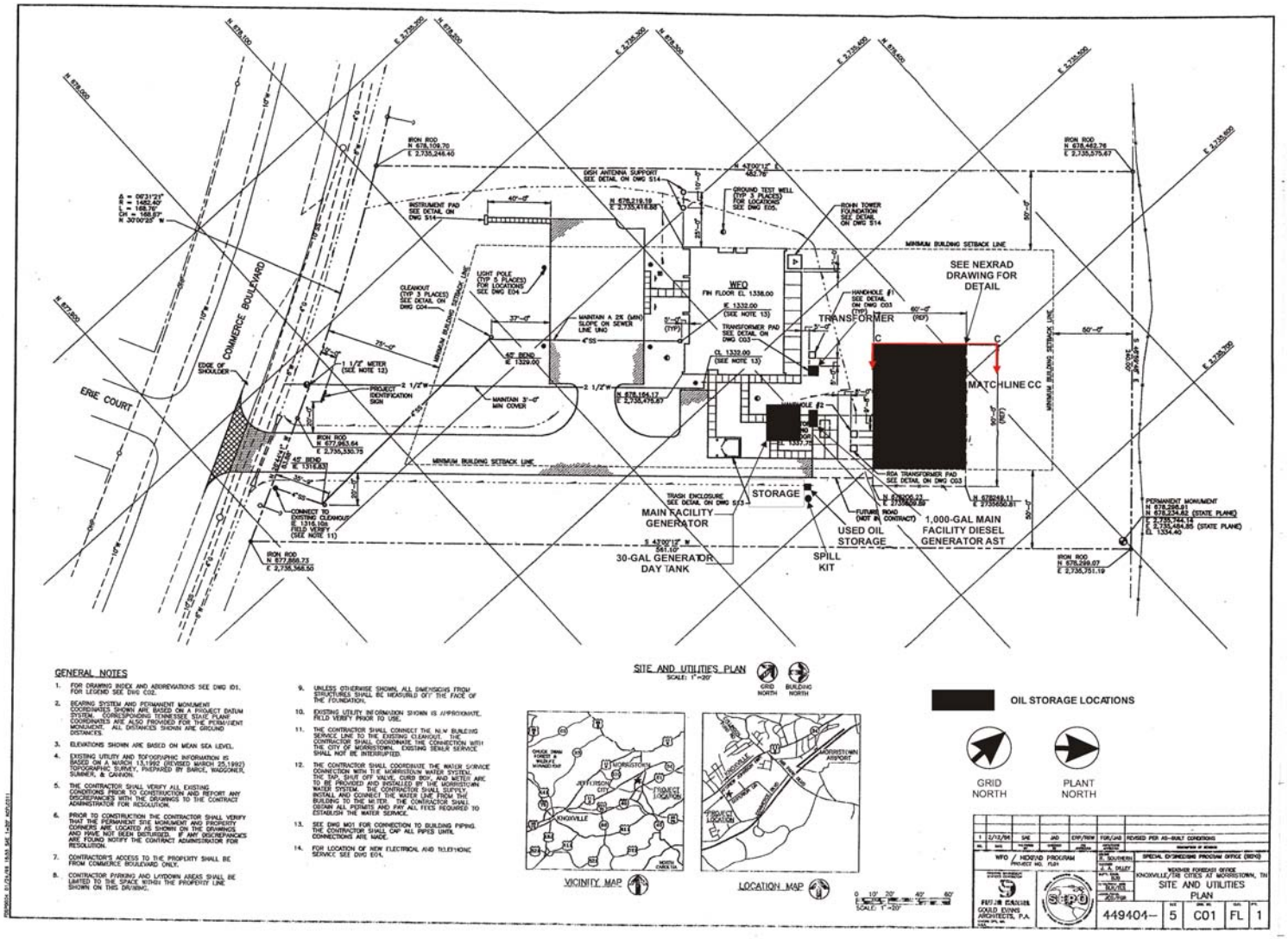

Figure 2. Site Drawing

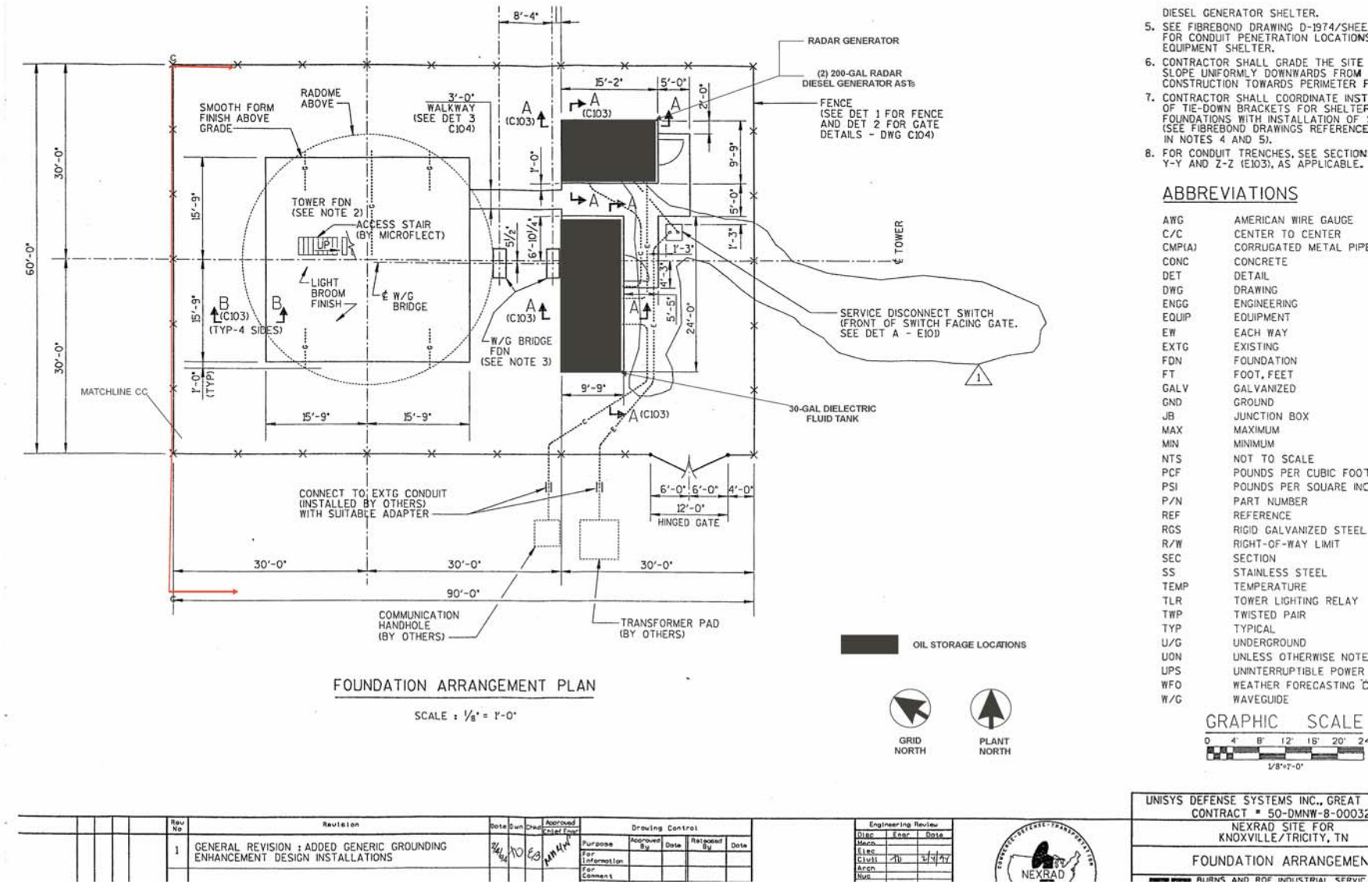

Figure 3. Detail of NEXRAD

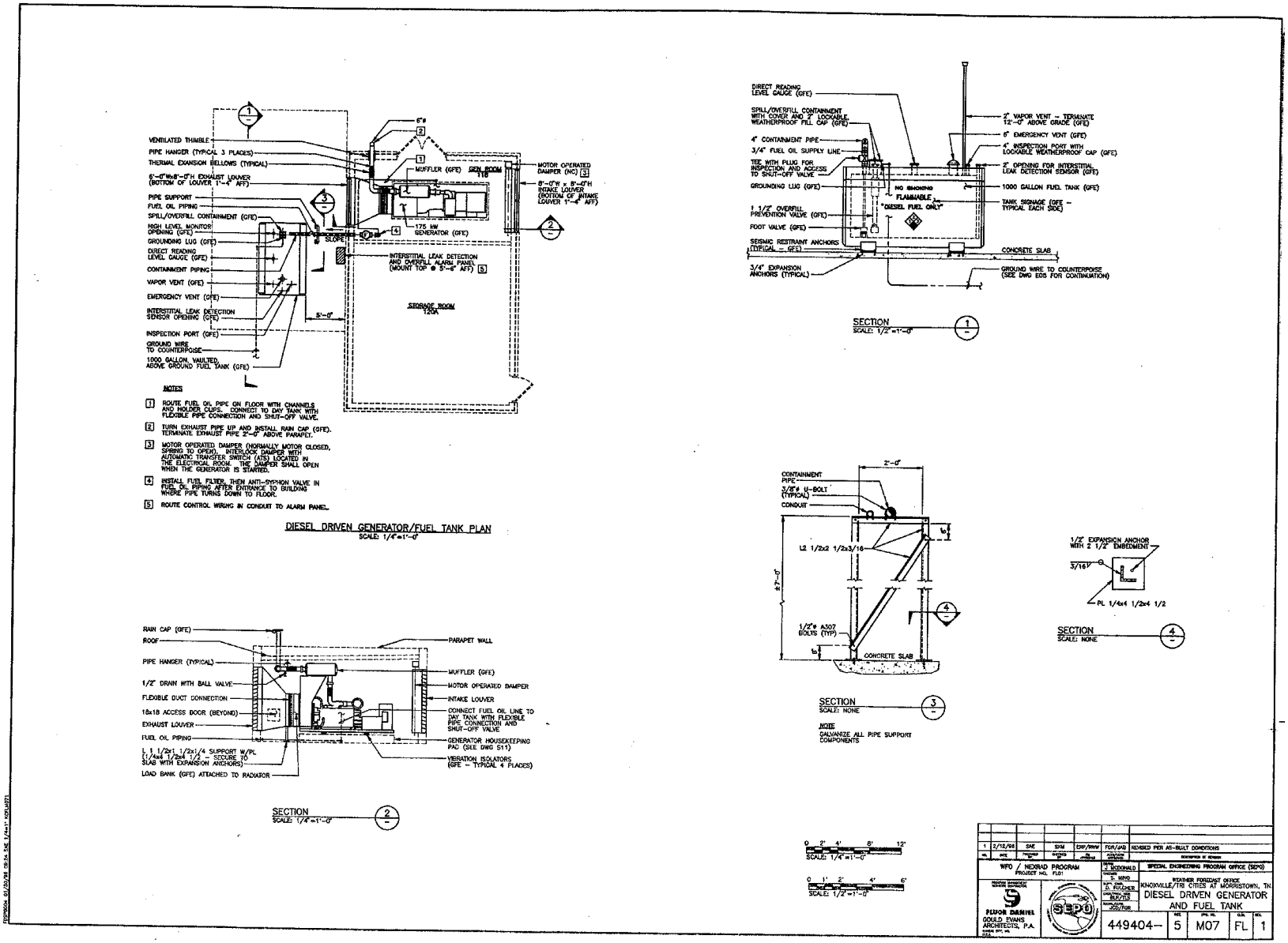

Figure 4. WFO AST and Generator Diagram

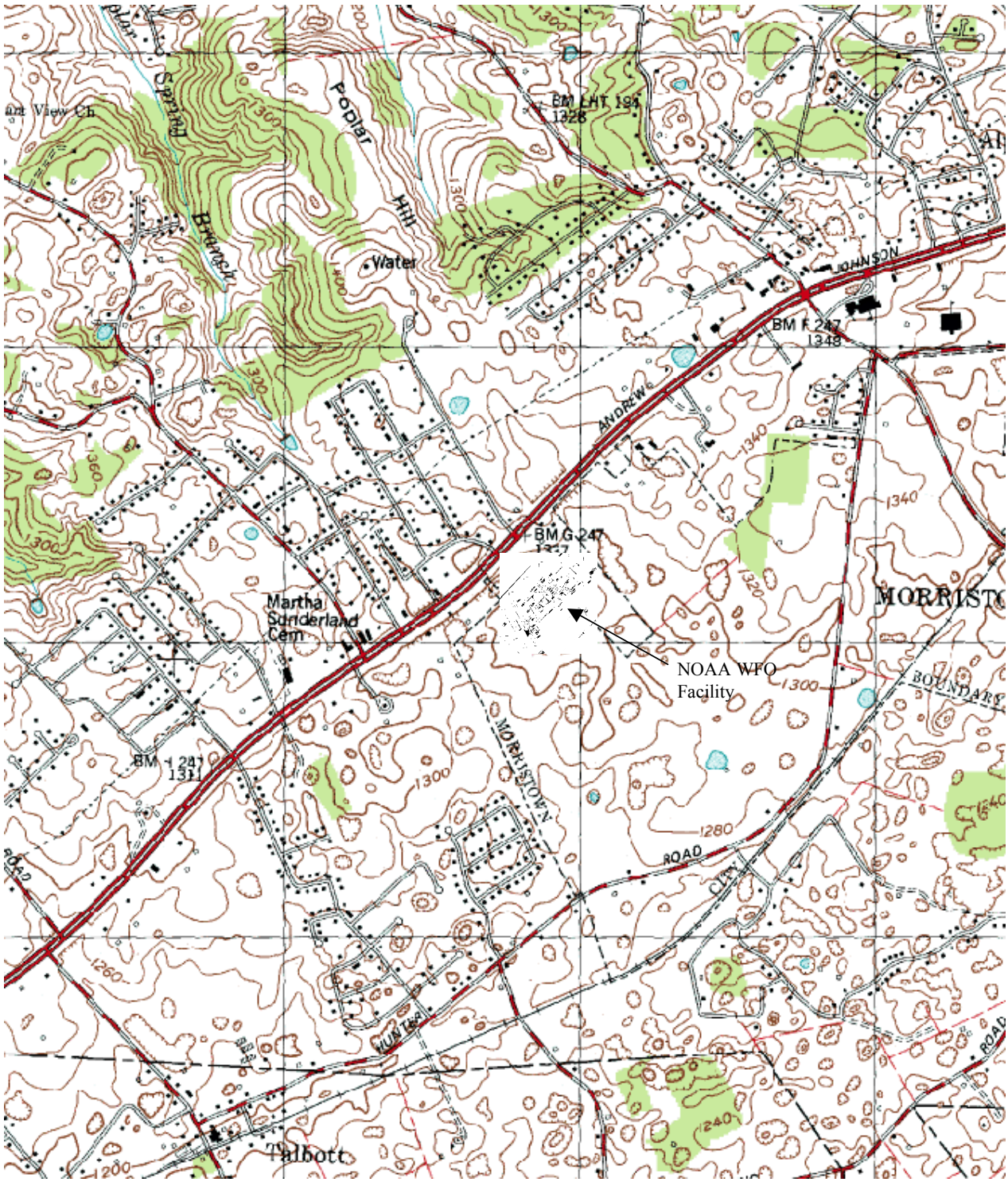

Figure 5. Topographic Map

ATTACHMENTS

ATTACHMENT 1 40 CFR 112

Federal Register

Wednesday,
July 17, 2002

Part II

Environmental Protection Agency

40 CFR Part 112

Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 112

[FRL–7241–5]

RIN 2050–AC62

Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA or the Agency or we) is amending the Oil Pollution Prevention regulation promulgated under the authority of the Clean Water Act. This rule includes requirements for Spill Prevention, Control, and Countermeasure (SPCC) Plans, and for Facility Response Plans (FRPs). The final rule includes new subparts outlining the requirements for various classes of oil; revises the applicability of the regulation; amends the requirements for completing SPCC Plans; and makes other modifications. The final rule also contains a number of provisions designed to decrease regulatory burden on facility owners or operators subject to the rule, while preserving environmental protection. We expect that today's rule will reduce the paperwork burden associated with SPCC requirements by approximately 40%. We have also made the regulation easier to understand and use.

DATES: This rule is effective August 16, 2002.

ADDRESSES: The official record for this rulemaking is located in the Superfund Docket at 1235 Jefferson Davis Highway, Crystal Gateway 1, Arlington, Virginia 22202, Suite 105. The docket numbers for the final rule are SPCC–1P, SPCC–2P, and SPCC–7. The record supporting this rulemaking is contained in the Superfund Docket and is available for inspection by appointment only, between the hours of 9 a.m. and 4 p.m., Monday through Friday, excluding legal holidays. You may make an appointment to review the docket by calling 703–603–9232. You may copy a maximum of 100 pages from any regulatory docket at no cost. If the number of pages exceeds 100, however, we will charge you $0.15 for each page after 100. The docket will mail copies of materials to you if you are outside of the Washington, DC metropolitan area.

FOR FURTHER INFORMATION CONTACT: Hugo Paul Fleischman, Oil Program Center, U.S. Environmental Protection Agency, at 703–603–8769 (*fleischman.hugo@epa.gov*); or the RCRA/Superfund Hotline at 800–424–9346 (in the Washington, DC metropolitan area, 703–412–9810)(*epahotline@bah.com*). The Telecommunications Device for the Deaf (TDD) Hotline number is 800–553–7672 (in the Washington, DC metropolitan area, 703–412–3323). You may wish to visit the Oil Program's Internet site at *www.epa.gov/oilspill.*

SUPPLEMENTARY INFORMATION: The contents of this preamble are as follows:

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B. Background of This Rulemaking
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IV. Discussion of Issues
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C. "Should to Shall to Must" Clarification
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2. PEs Employed by the Facility
3. Completion of Testing
4. Site Visits
E. Electrical Facilities and Other Operational Users of Oil
F. Discretionary Provisions
G. Design Capabilities of Drainage Systems, Other than Production Facilities
H. Compliance Costs
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V. Section by Section Analysis (Includes: Background, Comments, and Response to Comments)
VI. Summary of Supporting Analyses
A. Executive Order 12866—OMB Review
B. Executive Order 12898—Environmental Justice
C. Executive Order 13045—Children's Health
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E. Executive Order 13132—Federalism
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I. Paperwork Reduction Act
J. National Technology Transfer and Advancement Act
K. Congressional Review Act

I. Entities Affected by This Rule

Entities Potentially Regulated by this Rule Include:

CATEGORY	NAICS Codes
Crop and Animal Production	111–112.
Crude Petroleum and Natural Gas Extraction	211111.
Coal Mining, Non-Metallic Mineral Mining and Quarrying	2121/2123/213114/213116.
Electric Power Generation, Transmission, and Distribution	2211.
Heavy Construction	234.
Petroleum and Coal Products Manufacturing	324.
Other Manufacturing	31–33.
Petroleum Bulk Stations and Terminals	42271.
Gasoline Stations/Automotive Rental and Leasing	4471/5321.
Heating Oil Dealers	454311.
Transportation (including Pipelines), Warehousing, and Marinas	482–486/488112–48819/4883/48849/492–493/71393.
Elementary and Secondary Schools, Colleges	6111–6113.
Hospitals/Nursing and Residential Care Facilities	622–623.

"NAICS" refers to the North American Industry Classification System, a method of classifying various facilities. The NAICS was adopted by the United States, Canada, and Mexico on January 1, 1997 to replace the Standard Industrial Classification (SIC) code. This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. It lists the types of entities of which we are now aware that could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility could be regulated by this action, you should carefully examine the criteria in §§ 112.1 and 112.20 of title 40 of the Code of Federal Regulations and of today's rule, which explain the applicability of the rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

II. Introduction

A. Statutory Authority

Section 311(j)(1)(C) of the Clean Water Act (CWA or Act), 33 U.S.C. 1251, requires the President to issue regulations establishing procedures, methods, equipment, and other requirements to prevent discharges of oil from vessels and facilities and to contain such discharges. The President has delegated the authority to regulate non-transportation-related onshore facilities under section 311(j)(1)(C) of the Act to the U.S. Environmental Protection Agency. Executive Order 12777, section 2(b)(1), (56 FR 54757, October 22, 1991), superseding Executive Order 11735, 38 FR 21243. By this same Executive Order, the President has delegated similar authority over transportation-related onshore facilities, deepwater ports, and vessels to the U.S. Department of Transportation (DOT), and authority over other offshore facilities, including associated pipelines, to the U.S. Department of the Interior (DOI). A Memorandum of Understanding (MOU) among EPA, DOI, and DOT effective February 3, 1994, has redelegated the responsibility to regulate certain offshore facilities located in and along the Great Lakes, rivers, coastal wetlands, and the Gulf Coast barrier islands from DOI to EPA. *See* Executive Order 12777, section 2(i) regarding authority to redelegate. The MOU is included as Appendix B to 40 CFR part 112. An MOU between the Secretary of Transportation and the EPA Administrator, dated November 24, 1971 (36 FR 24080), established the definitions of non-transportation-related and transportation-related facilities. The definitions from the 1971 MOU are included as Appendix A to 40 CFR part 112.

B. Background of This Rulemaking

Part 112 of 40 CFR outlines the requirements for both the prevention of and the response to oil spills. The prevention aspect of the rule requires preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. This rulemaking affects SPCC and FRP requirements. The SPCC requirements were originally promulgated on December 11, 1973 (38 FR 34164), under the authority of section 311(j)(1)(C) of the Act. The regulation established spill prevention procedures, methods, and equipment requirements for non-transportation-related onshore and offshore facilities with aboveground storage capacity greater than 1,320 gallons (or greater than 660 gallons in a single container), or completely buried oil storage capacity greater than 42,000 gallons. Regulated facilities were also limited to those that, because of their location could reasonably be expected to discharge oil in harmful quantities into the navigable waters of the United States or adjoining shorelines.

We have amended the SPCC requirements a number of times, and those amendments are described in an October 22, 1991 **Federal Register** proposed rule. 56 FR 54612. In the October 1991 document, in addition to the description of past amendments, EPA proposed new revisions that involved changes in the applicability of the regulation and the required procedures for the completion of SPCC Plans, as well as the addition of a facility notification provision. The proposed rule also reflected changes in the jurisdiction of section 311 of the Act made by amendments to the Act in 1977 and 1978. We have finalized some of those proposed revisions, with modifications, in this rule.

On February 17, 1993, we again proposed clarifications of and technical changes to the SPCC rule. We also proposed facility response planning requirements to implement the Oil Pollution Act of 1990 (OPA). 58 FR 8824. The proposed changes to the SPCC rule included clarifications of certain requirements, response plans for facilities without secondary containment, prevention training, and methods of determining whether a tank would be subject to brittle fracture. We promulgated the facility response planning requirements of the 1993 proposal on July 1, 1994, (59 FR 34070), and they are codified at 40 CFR 112.20–112.21. We have finalized the proposed 1993 prevention requirements, with modifications, in this rule.

In 1996, EPA completed a survey and analysis of SPCC facilities. The survey was designed to ensure that data on the sampled facilities could be statistically extrapolated to the nation as a whole for all facilities regulated by EPA's SPCC regulation. We used the results of that survey and analysis to develop a proposed rule affecting SPCC facilities on December 2, 1997. 62 FR 63812. The survey and analytical results are part of the administrative record for this rulemaking.

The purpose of the 1997 proposal was to reduce the information collection burden imposed by the prevention requirements in the SPCC rule and the FRP rule without creating an adverse impact on public health or the environment. We also proposed changes in information collection requirements for facility response plans, but have withdrawn them in this rulemaking. Those changes would have affected the calculation of storage capacity at certain facilities for response plan purposes. 62 FR 63816. However, see new § 112.1(d)(6). The 1997 SPCC proposals, as modified, are finalized in this rule.

On April 8, 1999, we proposed revision to facility response plan requirements. 64 FR 17227. The main purpose of the proposal was to provide a more specific methodology for planning response resources that can be used by an owner or operator of a facility that handles, stores, or transports animal fats and vegetable oils. We finalized that proposal on June 30, 2000. 65 FR 40776. The final rule included four new definitions that are applicable to all of part 112.

III. Summary of Major Rule Provisions

For your convenience, we have developed a table showing a summary of the major revisions in this rule. The table does not always use exact rule text, but summarizes rule provisions. For exact rule text, see 40 CFR part 112 (2000) for text of the current rule; for exact text of the revised rule, see the rule text following this preamble.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES

Current SPCC rule	Revised SPCC rule	Comment
Section 112.1: General Applicability		

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.1(b): Explains that the SPCC rule applies to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, or consume oil and oil products, and might reasonably be expected to discharge oil in harmful quantities into or upon navigable waters of the United States or adjoining shorelines.	§ 112.1(b): Explains that the SPCC rule applies to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, use, or consume oil and oil products, and might reasonably be expected to discharge oil in quantities that may be harmful into or upon navigable waters of the United States or adjoining shorelines, or waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act, or affecting certain natural resources.	§ 112.1(b): The revised rule clarifies that users of oil are also subject to the rule. It also expands the scope of the rule to conform with the expanded jurisdiction in the amended Clean Water Act.
§ 112.1(d)(2)(i): Section 112.1(d)(2) exempts from the rule a facility which meets both criteria specified in § 112.1(d)(2)(i) and (ii). The first criterion, found in § 112.1(d)(2)(i) is: the completely buried storage capacity of the facility is 42,000 gallons or less of oil. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity contained in tanks.	§ 112.1(d)(2)(i): Section 112.1(d)(2) exempts from the rule a facility which meets both criteria specified in § 112.1(d)(2)(i) and (ii). The first criterion, § 112.1(d)(2)(i) is: the completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility does not include the capacity of completely buried tanks, as defined in § 112.2, that are currently subject to all of the technical requirements of 40 CFR part 280 or all of the technical requirements of a State program approved under 40 CFR part 281. Also, the completely buried storage capacity of a facility does not include the capacity of completely buried tanks that are "permanently closed," as defined in § 112.2. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity contained in tanks.	§ 112.1(d)(2)(i): The revised rule provides that completely buried tanks subject to all of the technical requirements of parts 280 or 281 do not count in the calculation of the 42,000 gallon threshold. It also clarifies that permanently closed tanks do not count in the calculation of that threshold. The threshold continues to apply to storage capacity contained in operating equipment as well as to storage capacity contained in tanks.
§ 112.1(d)(2)(ii): The second criterion, found in § 112.1(d)(2)(ii) is: the storage capacity, which is not buried, of the facility is 1,320 gallons or less of oil, provided that no single container has a storage capacity of greater than 660 gallons. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity in containers.	§ 112.1(d)(2)(ii): The second criterion found in § 112.1(d)(2)(ii) is: the aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aboveground storage capacity of a facility does not include the capacity of containers that are "permanently closed," as defined in 112.2. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity in containers.	§ 112.1(d)(2)(ii): The revised rule raises the threshold for aboveground storage capacity by eliminating the provision that triggers the requirement to prepare and implement an SPCC Plan if any single container has a capacity greater than 660 gallons. It maintains the greater than 1,320 gallon threshold. The revised rule also establishes a de minimis container capacity size to calculate aboveground storage capacity. Only containers with a capacity of 55 gallons or greater are counted in the calculation of aboveground storage capacity. The revised rule clarifies that permanently closed containers do not count in the calculation of aboveground storage capacity. The threshold continues to apply to storage capacity contained in operating equipment as well as to storage capacity in containers.
§ 112.1(d)(4): No counterpart in current rule	§ 112.1(d)(4): Exempts from the SPCC requirements completely buried storage tanks, as defined in § 112.2, as well as connected underground piping, underground ancillary equipment, and containment systems, when such tanks are subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281, except that such tanks must be marked on the facility diagram as required by § 112.7(a)(3), if the facility is otherwise subject to this part.	§ 112.1(d)(4): Completely buried storage tanks subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281 are no longer required to comply with SPCC provisions, except for the facility diagram. EPA estimates that under this new rule, most gasoline service stations will drop out of the SPCC program.
§ 112.1(d)(5): No counterpart in current rule	§ 112.1(d)(5): The revised rule exempts containers with a storage capacity of less than 55 gallons of oil from all SPCC requirements.	§ 112.1(d)(5): In response to comments, EPA has established a minimum size container for purposes of the regulatory threshold. Containers with a storage capacity of less than 55 gallons of oil are exempt from all SPCC requirements.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.1(d)(6): No counterpart in current rule	§ 112.1(d)(6): Exempts any facility or part thereof from the rule, if used exclusively for wastewater treatment and not used to meet any other requirement of part 112. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this paragraph.	§ 112.1(d)(6): A facility or part thereof used exclusively for wastewater treatment will no longer be subject to prevention planning unless it is used to meet part 112 requirements.
§ 112.1(f): No counterpart in current rule	§ 112.1(f): Notwithstanding any regulatory exemptions, the Regional Administrator may require that the owner or operator of any facility subject to EPA jurisdiction under section 311(j) of the Clean Water Act (CWA), prepare and implement an SPCC Plan, or any applicable part, to carry out the purposes of the CWA. The rule includes notice and appeal provisions.	§ 112.1(f): This amendment gives the Regional Administrator authority to require preparation of an entire SPCC plan, or applicable part, by an owner or operator of a facility exempted from SPCC requirements when it becomes necessary to achieve the purposes of the CWA. This authority will be exercised on a case-by-case basis. The decision to require a Plan could be based on the presence of environmental concerns not adequately addressed under other regulations, or other relevant environmental factors, for example, discharge history.
Section 112.2—Definitions		
§ 112.2—definition of *facility:* No counterpart in current rule.	§ 112.2—definition of *facility:* "Facility" is defined as any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil transfer, oil distribution, and waste treatment, or in which oil is used. . . ."	§ 112.2—definition of *facility:* The revised rule clarifies that a facility may be as small as a piece of equipment, for example, a tank, or as large as a military base.
Section 112.3: Requirement to prepare and implement Spill Prevention, Control, and Countermeasure Plan		
§ 112.3(a): An owner or operator of an onshore or offshore facility in operation on or before January 10, 1974, that has had a discharge to navigable waters or adjoining shorelines, or, due to its location, could reasonably be expected to have a discharge to navigable waters or adjoining shorelines, must prepare and fully implement an SPCC Plan, in writing and in accordance with § 112.7. The owner or operator must prepare the Plan within 6 months, and fully implement it as soon as possible, but not later than within 1 year.	§ 112.3(a): An owner or operator (O/O) of an onshore or offshore facility in operation on or before August 16, 2002, that has had a discharge as described in § 112.1(b), or, due to its location, could reasonably be expected to have a discharge as described in § 112.1(b), must prepare a written Plan in accordance with § 112.7 and any other applicable section within 6 months of the effective date of the rule, and implement it as soon as possible, but not later than within 1 year of the effective date of the rule. The O/O of facility that becomes operational after August 16, 2002 through August 18, 2003 must prepare and implement a Plan not later than August 18, 2003.	§ 112.3(a): For those facilities already in operation on the effective date of the rule, an owner or operator of a facility subject to the rule must prepare an SPCC Plan within the current time frame of six months. He may take up to an additional six months to implement the Plan. The revised rule extends this same time frame to amendments necessary to bring the Plan into compliance with rule revisions. An owner or operator of a facility becoming operational after August 16, 2002 through August 18, 2003 must prepare and implement a Plan not later than August 18, 2003.
§ 112.3(b): The owner or operator of an onshore and offshore facility that becomes operational after January 10, 1974, and that has had a discharge to navigable waters or adjoining shorelines, or could reasonably be expected to have a discharge to navigable waters or adjoining shorelines, must prepare an SPCC Plan. Unless the owner or operator is granted an extension of time to prepare and implement the Plan by the Regional Administrator, he must prepare the Plan within 6 months and fully implement it as son as possible, but not later than within 1 year.	§ 112.3(b): The owner or operator of an onshore or offshore facility that becomes operational after August 18, 2003, and could reasonably be expected to have a discharge as described in § 112.1(b), from that facility, must prepare and implement an SPCC Plan before beginning operations.	§ 112.3(b): The owner or operator of a facility that becomes operational after August 18, 2003 must now prepare and implement an SPCC Plan before beginning operations. The time frame in the current rule is up to 6 months for Plan preparation and up to 6 months more for Plan implementation.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.3(d): No SPCC Plan is effective to satisfy the requirements of the SPCC rule unless it has been reviewed and certified by a Registered Professional Engineer (PE). By means of this certification the PE, having examined the facility and being familiar with the provisions of the SPCC rule, attests that the SPCC Plan has been prepared in accordance with good engineering practices. The PE's certification does not relieve the owner or operator of an onshore or offshore facility of his duty to prepare and fully implement the Plan in accordance with all applicable requirements.	§ 112.3(d): No SPCC Plan is effective to satisfy the requirements of the SPCC rule unless it has been reviewed and certified by a PE. By means of this certification the PE attests that: (i) he is familiar with the requirements of the SPCC rule; (ii) he or his agent has visited and examined the facility; (iii) the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the SPCC rule; (iv) procedures for required inspections and testing have been established; and, (v) the Plan is adequate for the facility. The PE's certification does not relieve the owner or operator of an onshore or offshore facility of his duty to prepare and fully implement the Plan in accordance with all applicable requirements.	§ 112.3(d): The revised rule adds specificity to the PE's attestation. The specificity includes a requirement that the PE consider applicable industry standards and certify that the Plan is prepared in accordance with part 112 requirements. Presently, the PE must attest only that the Plan has been prepared in accordance with good engineering practice. The revised rule allows an agent of the PE to visit and examine the facility in place of the PE, but the PE must review the agent's work, and certify the Plan.
§ 112.3(e): An owner or operator of a facility for which an SPCC Plan is required must maintain a complete copy of the Plan at the facility if the facility is attended as least 8 hours per day, or at the nearest field office if the facility is not so attended, and must make the Plan available to the Regional Administrator for on-site review during normal working hours.	§ 112.3(e): An owner or operator of a facility for which an SPCC Plan is required must maintain a complete copy of the Plan at the facility if the facility is attended at least 4 hours per day, or at the nearest field office if the facility is not so attended, and must make the Plan available to the Regional Administrator for on-site review during normal working hours.	§ 112.3(e): The revised rule requires the facility owner or operator to maintain a copy of the Plan at the facility if it is attended at least 4 hours a day, in contrast to the current requirement to maintain it at the facility if it is attended at least 8 hours a day.
§ 112.3(f): The Regional Administrator may authorize an extension of time for the preparation and implementation of an SPCC Plan, when he finds that the owner or operator cannot comply with all SPCC requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond his control and without his fault, or the fault of his agents or employees. The rule also specifies what the letter requesting an extension must contain.	§ 112.3(f): The Regional Administrator may authorize an extension of time for the preparation and implementation of an SPCC Plan, or any amendment thereto, when he finds that the owner or operator cannot comply with all SPCC requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond his control and without his fault, or the fault of his agents or employees. The rule also specifies what the letter requesting an extension must contain.	§ 112.3(f): The revised rule provides for extension for amendments of the Plan, as well as the entire Plan.
Section 112.4: Amendment of Spill Prevention, Control, and Countermeasures Plan by Regional Administrator		
§ 112.4(a): Whenever an SPCC facility has: (1) discharged more than 1,000 U.S. gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single discharge to navigable waters or adjoining shorelines, or (2) discharged oil in harmful quantities, as defined in 40 CFR part 110, into or upon the navigable waters of the United States or adjoining shorelines in each of 2 discharges to navigable waters or adjoining shorelines, reportable under section 311(b)(5) of the Clean Water Act, within any 12-month period, the owner or operator of the facility must submit to the Regional Administrator (RA), within 60 days from the time the facility becomes subject to this section, 10 different items of information, plus additional information pertinent to the Plan if the RA requests it.	§ 112.4(a): Whenever an SPCC facility has: (1) discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or (2) discharged more than 42 U.S. gallons of oil, as described in § 112.1(b), in each of 2 discharge, within any 12-month period, the owner or operator of the facility must submit to the RA, within 60 days from the time the facility becomes subject to this section, 8 different items of information, plus additional information pertinent to the Plan if the RA requests it.	§ 112.4(a): We have revised the geographic scope of the rule in accordance with the CWA amendments, by using the phase "discharge as described in § 112.1(b)." We also raised the threshold for reporting two discharges as described in § 112.1(b), from a "reportable" quantity under the Clean Water Act, to a threshold of more than 42 U.S. gallons, or 1 barrel, in each of those discharges. The 1,000 gallon threshold for a single discharge as described in § 112.1(b) remains unchanged. We also reduced the amount of information that must minimally be submitted to the RA.
§ 112.4(b): Section 112.4 does not apply until the expiration of the time permitted for the preparation and implementation of the Plan under § 112.3.	§ 112.4(b): Section 112.4 does not apply until the expiration of the time permitted for the preparation and implementation of the Plan under § 112.3.	§ 112.4(b): Section 112.3 in the revised rule allows more time for some facilities for preparation and implementation of a Plan, or any amendments thereto, than in the 1991 proposed rule. Therefore, the implementation of the requirements of § 112.4 is postponed until the new time frames in § 112.3 have passed.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.4(c): The owner or operator is required to provide the same information he provided to EPA, under § 112.4(a), to the State agency in charge of water pollution control activities in and for the State in which the facility is located at the same time he provides it to EPA. After receiving that information, the State agency may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment and other requirements for equipment necessary to prevent and to contain discharges of oil from the facility.	§ 112.4(c): The owner or operator is required to provide the same information he provided to EPA, under § 112.4(a), to the State agency in charge of oil pollution control activities in the State in which the facility is located at the same time he provides it to EPA. After receiving that information, the State agency or agencies may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment and other requirements for equipment necessary to prevent and to contain discharges of oil from the facility.	§ 112.4(c): The revised rule changes the requirement from notification to the State agency in charge of water pollution control activities to notification to the State agency in charge of oil pollution control activities. There may be more than one such agency in some States.
§ 112.4(d): This section allows the Regional Administrator to require a facility owner or operator to amend his Plan after review of materials the owner or operator submits under § 112.4 (a) and (c).	§ 112.4(d): This section allows the Regional Administrator to require a facility owner or operator to amend his Plan after review of materials the owner or operator submits under § 112.4 (a) and (c), or after on-site review of the Plan.	§ 112.4(d): The revised rule provides that the Regional Administrator may require Plan amendment after on-site review of the Plan.
Section 112.5: Amendment of Spill Prevention, Control, and Countermeasures Plan by owners or operators		
§ 112.5(b): This section requires an owner or operator to review his Plan at least every 3 years from the date a facility becomes subject to the SPCC rule. As a result of this review and evaluation, the owner or operator must amend the SPCC Plan within 6 months of the review to include more effective prevention and control technology if: (1) Such technology will significantly reduce the likelihood of a discharge to navigable waters or adjoining shorelines from the facility; and (2) if such technology has been field-proven at the time of the review.	≤§ 112.5(b): This section requires an owner or operator to review his Plan at least every 5 years from the date a facility becomes subject to the SPCC rule; or for an existing facility, 5 years from the date the last review was required under this part. The owner or operator must amend the SPCC Plan within 6 months of the review to include more effective prevention and control technology if: (1) Such technology will significantly reduce the likelihood of a discharge as described in § 112.1(b) from the facility; and (2) if such technology has been field-proven at the time of the review. Implementation of amendments is required within 6 months following amendment. The owner or operator must document completion of the review and evaluation, and must sign a statement as to whether he 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 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."	§ 112.5(b): The revised rule changes the period of review for SPCC Plans from 3 to 5 years. It also requires documentation of completion of the review and evaluation.
§ 112.5(c): This section requires that a Professional Engineer certify any amendments to an SPCC Plan.	§ 112.5(c): This section requires that a Professional Engineer certify any technical amendments to an SPCC Plan.	§ 112.5(c): The revised rule clarifies that a Professional Engineer must certify only technical amendments. PE certification is not required for non-technical amendments, like changes to phone numbers, names, etc.
Section 112.7: Spill Prevention, Control, and Countermeasure Plan general requirements. We have reorganized § 112.7 of the current regulation into §§ 112.7, 112.8, 112.9, 112.10, 112.11, 112.12, 112.13, 112.14, and 112.15 of the final rule based on facility type and type of oil.		

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.7: This section specifies that a Plan must be prepared in accordance with good engineering practices, and have the full approval of management at a level with authority to commit the necessary resources. The SPCC Plan must follow the sequence specified in the rule, and include a discussion of the facility's conformance with the requirements of the rule.	§ 112.7: This section specifies that a Plan must be prepared in accordance with good engineering practices, and have the full approval of management at a level with authority to commit the necessary resources. The SPCC Plan must follow the sequence specified in the rule, and include a discussion of the facility's conformance with the requirements of the rule. If you do not follow the sequence specified in the rule, you must prepare an equivalent prevention Plan acceptable to the Regional Administrator that meets all applicable requirements, and you must supplement it with section cross-referencing the location of requirements listed in the SPCC rule to the equivalent requirements in the other prevention plan.	§ 112.7: The revised rule allows differing formats for the Plan, other than the one format now specified. While you may use the format specified in the rule, you may also use other formats, such as State plans, Integrated Contingency Plans, and any other formats acceptable to the Regional Administrator. If you use another format, you must cross-reference its provisions to the requirement listed in the SPCC rule. Also, if you use another format, you must ensure that the format includes all applicable SPCC requirements, or you must supplement that format to include all applicable SPCC requirements.
§ 112.7(a)(2): No counterpart in current rule	§ 112.7(a)(2): This provision explicitly allows deviations from most of the rule's substantive requirements (except for secondary containment requirements), provided that you explain your reasons for nonconformance with the requirement, and provide equivalent environmental protection with an alternate measure. If the Regional Administrator determines that the alternate measure described in your Plan does not provide equivalent protection, he may require that you amend the Plan.	§ 112.7(a)(2): The revised rule explicitly allows deviations from most of the rule's substantive requirements (except for secondary containment requirements), provided that you explain your reasons for nonconformance with the requirement, and provide equivalent environmental protection with an alternate measure. If the Regional Administrator determines that the alternate measure described in your Plan does not provide equivalent protection, he may require that you amend your Plan.
§ 112.7(a)(3): No counterpart in current rule	§ 112.7(a)(3): This section requires a facility owner or operator to describe the physical layout of the facility and include a facility diagram in the Plan.	§ 112.7(a)(3): The facility diagram must include completely buried tanks exempted from other SPCC requirements.
§ 112.7(c): This section is the general provision requiring secondary containment.	§ 112.7(c): This section is the general provision requiring secondary containment.	§ 112.7(c): The revised rule maintains the current standard that dikes, berms, or retaining walls must be "sufficiently impervious" to contain oil. We withdrew the proposed standard that such secondary containment must be impermeable for 72 hours.
§ 112.7(d): When it is not practicable to install secondary containment at your facility, this section requires that you explain why and provide a strong oil spill contingency plan in your SPCC Plan. The contingency plan must follow the provisions of 40 CFR part 109. You must also provide in your SPCC Plan a written commitment to manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.	§ 112.7(d): When it is not practicable to install secondary containment at your facility, this section requires that you explain why and provide a strong oil spill contingency plan in your SPCC Plan. The contingency plan must follow the provisions of 40 CFR part 109. You must also provide in your SPCC Plan a written commitment to manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful; conduct periodic integrity testing of the containers; and, conduct periodic integrity and leak testing of the valves and piping.	§ 112.7(d): The revised rule adds new requirements for periodic integrity testing of containers, and periodic integrity and leak testing of valves and piping. We clarify that if you have submitted a facility response plan under § 112.20 for a facility, you need not provide for that facility either a contingency plan following the provisions of part 109, nor a written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.
§ 112.7(e)(8): This section requires that the owner or operator conduct required inspections in accordance with written procedures developed for the facility. The owner or operator must maintain these written procedures and a record of inspections, signed by the appropriate supervisor or inspector, as part of the SPCC Plan, and maintain them for a period of 3 years.	§ 112.7(e): This section requires that the owner or operator conduct required inspections and tests in accordance with written procedures developed by him or by the certifying engineer for the facility. The owner or operator must maintain these written procedures and a record of inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan, and maintain them for a period of 3 years. Records of inspections and tests kept pursuant to usual and customary business practices are sufficient for purposes of the rule.	§ 112.7(e): The revised rule allows use of usual and customary business records to serve as a record of tests or inspections, instead of keeping duplicate records. It also allows the owner or operator to keep those records as an appendix to the Plan, or in a separate log, etc., with the Plan, rather than requiring that those records be a part of the Plan. The rule also acknowledges that the certifying engineer, as well as the owner or operator, has a role in the development of inspection procedures.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.7(e)(10): The owner or operator of a facility is responsible for properly instructing personnel in the operation and maintenance of equipment to prevent the discharges of oil and applicable pollution control laws, rules, and regulations. An owner or operator must designate a person at each facility who is accountable for oil discharge prevention and who reports to facility management. An owner or operator must schedule and conduct discharge prevention briefings for operating personnel at intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges to navigable waters or adjoining shorelines, or failures, malfunctioning components, and recently developed precautionary measures.	§ 112.7(f): The owner or operator of a facility, at a minimum, must train oil-handling personnel in the operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility Plan. An owner or operator must designate a person at each facility who is accountable for oil discharge prevention and who reports to facility management. An owner or operator must schedule and conduct discharge prevention briefings for 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 recently developed precautionary measures.	§ 112.7(f): The revised rule mandates training only for oil-handling employees, instead of all employees. It specifies additional topics for the training of these employees. It also specifies that discharge prevention briefings must be conducted at least once a year, instead of at ''intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility.''
§ 112.7(i): No counterpart in current rule	§ 112.7(i): This section requires evaluation for field-constructed aboveground containers undergoing repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to fracture or other catastrophe. It also requires such evaluation when there has actually been a discharge or failure due to brittle fracture or other catastrophe.	§ 112.7(i): The brittle fracture requirement was triggered by the Ashland Oil tank collapse in 1988 due to brittle fracture.
Section 112.8: Requirements for onshore facilities (excluding production facilities).		
§ 112.7(e)(2)(iii): This section establishes substantive requirements for stormwater drainage from diked areas, and recordkeeping requirements for stormwater bypass events.	§ 112.8(c)(3): This section establishes substantive requirements for stormwater drainage from diked areas, and recordkeeping requirements for stormwater bypass events. The revised rule provides that records required under permits issued in accordance with the National Pollutant Discharge Elimination Systems (NPDES) rules are sufficient for recording stormwater bypass events.	§ 112.8(c)(3): The revised rule allows records required by NPDES permit regulations to record stormwater bypass events to be used for SPCC purposes in lieu of events records specifically prepared for purpose.
§ 112.7(e)(2)(vi): This provision requires that aboveground containers be subject to periodic integrity testing, taking into account tank design (floating roof, etc.) and using such techniques as hydrostatic testing, visual inspection, or a system of non-destructive shell thickness testing. The owner or operator must keep comparison records where appropriate, and must include tank supports and foundations in these inspections. In addition, operating personnel must frequently inspect the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas.	§ 112.8(c)(6): The revised rule requires that aboveground containers be tested for integrity on a regular schedule, and when material repairs are done. The frequently and type of testing must take into account container size and design (floating roof, skid-mounted, elevated, partially buried, for example). The owner or operator must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other system of non-destructive shell testing. The owner or operator must keep comparison records and must include tank supports and foundations in these inspections. In addition, operating personnel must frequently inspect the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas. Records of inspections and tests kept pursuant to usual and customary business practices are sufficient for purposes of the rule.	§ 112.8(c)(6): The revised rule requires that an owner or operator test aboveground containers for integrity on a regular schedule, and when material repairs are done. The rationale for adding a testing requirement when material repairs are done is that material repairs might increase the potential for oil discharges. Usual and customary business records may be used for the purpose of integrity testing, instead of records specifically created for this purpose.

SUMMARY OF MAJOR REVISIONS TO THE CURRENT SPCC RULES—Continued

Current SPCC rule	Revised SPCC rule	Comment
§ 112.7(e)(3)(i): This section requires that buried piping installations have protective wrapping and coating and cathodic protection, if soil conditions warrant.	§ 112.8(d)(1): This section requires that buried piping that is installed or replaced on or after August 16, 2002 must have protective wrapping and coating and cathodic protection, or otherwise satisfy the corrosion protection provisions for piping in 40 CFR part 280 or a State program approved under 40 CFR part 281.	§ 112.8(d)(1): The revised rule requires that all buried piping that is installed or replaced on or after August 16, 2002 must have protective wrapping and coating and cathodic protection, or otherwise satisfy the corrosion protection provisions for piping in 40 CFR part 280 or a State program approved under 40 CFR part 281, for all soil conditions.
Section 112.9: Requirements for onshore oil production facilities.		
§ 112.7(e)(5)(ii): This section provides requirements for stormwater drainage events.	§ 112.9(b)(1): This section provides requirements for stormwater drainage events.	§ 112.9(b)(1): The revised rule provides that records required by NPDES permit regulations are allowable to record stormwater bypass events for SPCC purposes in lieu of records specifically generated for that purpose.
§ 112.7(e)(5)(iii)(B): This section requires secondary containment for onshore production facilities.	§ 112.9(c)(2): This section requires secondary containment for onshore production facilities.	§ 112.9(c)(2): The revised rule clarifies that the secondary containment must include sufficient freeboard to contain precipitation.

IV. Discussion of Issues

Below is a discussion of the major issues for which we solicited comments in the 1991, 1993, and 1997 proposals. We also discuss the use of industry standards to comply with the rule. Following these issues, we discuss the revisions to each section and the major comments received, as well as responses to those comments. A detailed Response to Comments document addressing all comments is also part of this rulemaking and may be found in the administrative record for this rule.

A. Reorganization of the Rule

Background

In 1991, EPA proposed to reorganize the SPCC rule based on facility type. The purpose of that proposed reorganization was to clarify SPCC Plan requirements for different types of facilities. In this rulemaking, we are dividing the rule into subparts. Subpart A consists of an applicability section, definitions, and general requirements for all facilities. Subparts B and C outline the requirements for different types of facilities storing and using different types of oils. Subpart B is for facilities storing or using petroleum oils or other non-petroleum oils, except those oils covered by subpart C. Subpart C is for facilities storing or using animal fats and oils and greases, or fish and marine mammal oils; and, oils of vegetable origin, including oils from seeds, nuts, fruits, and kernels. Subpart D is for response requirements.

If you have already prepared an SPCC Plan, you were required to follow the sequence of § 112.7 of the current rule, prior to today's revisions. Today, we are reorganizing that portion of the rule into §§ 112.7 through 112.15, based on facility type and type of oil. Under the introduction to § 112.7 of today's rule, if your Plan does not follow the revised sequence, you must supplement it with a section cross-referencing the location of requirements listed in the revised rule and the equivalent requirements in your Plan. To assist you in preparing this cross-reference, the following table lists each requirement in the revised rule, provides the corresponding paragraph of the current rule, and leaves a space where you can show the location of the provision in your Plan. We have put this rule, including the table below, on our website for your convenience. You may download it for your use. *See* our Web site at *www.epa.gov/oilspill.*

Under the revised rule, § 112.7 sets out the general requirements for SPCC Plans for all facilities and all types of oil. Sections 112.8 to 112.11 set out the SPCC Plan requirements for petroleum oil and for non-petroleum oils other than animal fats and vegetable oils. Sections 112.12 to 112.15 set out the SPCC Plan requirements for animal fats and oils and greases, and fish and marine mammal oils; and for oils of vegetable origin, including oils from seeds, nuts, fruits, and kernels.

Revised rule	Current rule	Description of rule	Page
§ 112.7	§ 112.7	General requirements for SPCC Plans for all facilities and all oil types.	
§ 112.7(a)	§ 112.7	General requirements; discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures.	
§ 112.7(b)	§ 112.7(b)	Fault analysis	
§ 112.7(c)	§ 112.7(c)	Secondary containment	
§ 112.7(d)	§ 112.7(d)	Contingency planning	
§ 112.7(e)	§ 112.7(e)(8)	Inspections, tests, and records	
§ 112.7(f)	§ 112.7(e)(10)	Employee training and discharge prevention procedures	
§ 112.7(g)	§ 112.7(e)(9)	Security (excluding oil production facilities)	
§ 112.7(h)	§ 112.7(e)(4)	Loading/unloading (excluding offshore facilities)	
§ 112.7(i)	n/a	Brittle fracture evaluation requirements	
§ 112.7(j)	§ 112.7(e)	Conformance with State requirements	

Revised rule	Current rule	Description of rule	Page
§ 112.8 § 112.12	§ 112.7(e)(1)	Requirements for onshore facilities (excluding production facilities).	
§ 112.8(a), § 112.12(a)	n/a	General and specific requirements	
§ 112.8(b), § 112.12(b)	§ 112.7(e)(1)	Facility drainage	
§ 112.8(c), § 112.12(c)	§ 112.7(e)(2)	Bulk storage containers	
§ 112.8(d), § 112.12(d)	§ 112.7(e)(3)	Facility transfer operations, pumping, and facility process	
§ 112.9, § 112.13	§ 112.7(e)(5)	Requirements for onshore production facilities	
§ 112.9(a), § 112.13(a)	n/a	General and specific requirements	
§ 112.9(b), § 112.13(b)	§ 112.7(e)(5)(ii)	Oil production facility drainage	
§ 112.9(c), § 112.13(c)	§ 112.7(e)(5)(iii)	Oil production facility bulk storage containers	
§ 112.9(d), § 112.13(d)	§ 112.7(e)(5)(iv)	Facility transfer operations, oil production facility	
§ 112.10, § 112.14	§ 112.7(e)(6)	Requirements for onshore oil drilling and workover facilities	
§ 112.10(a), § 112.14(a)	n/a	General and specific requirements	
§ 112.10(b), § 112.14(b)	§ 112.7(e)(6)(i)	Mobile facilities	
§ 112.10(c), § 112.14(c)	§ 112.7(e)(6)(ii)	Secondary containment—catchment basins or diversion structures.	
§ 112.10(d), § 112.14(d)	§ 112.7(e)(6)(iii)	Blowout prevention (BOP).	
§ 112.11, § 112.15	§ 112.7(e)(7)	Requirements for offshore oil drilling, production, or workover facilities.	
§ 112.11(a), § 112.15(a)	n/a	General and specific requirements	
§ 112.11(b), § 112.15(b)	§ 112.7(e)(7)(ii)	Facility drainage	
§ 112.11(c), § 112.15(c)	§ 112.7(e)(7)(iii)	Sump systems	
§ 112.11(d), § 112.15(d)	§ 112.7(e)(7)(iv)	Discharge prevention systems for separators and treaters	
§ 112.11(e), § 112.15(e)	§ 112.7(e)(7)(v)	Atmospheric storage or surge containers; alarms	
§ 112.11(f), § 112.15(f)	§ 112.7(e)(7)(vi)	Pressure containers; alarm systems	
§ 112.11(g), § 112.15(g)	§ 112.7(e)(7)(vii)	Corrosion protection	
§ 112.11(h), § 112.15(h)	§ 112.7(e)(7)(viii)	Pollution prevention system procedures	
§ 112.11(i), § 112.15(i)	§ 112.7(e)(7)(ix)	Pollution prevention systems; testing and inspection	
§ 112.11(j), § 112.15(j)	§ 112.7(e)(7)(x)	Surface and subsurface well shut-in valves and devices	
§ 112.11(k), § 112.15(k)	§ 112.7(e)(7)(xi)	Blowout prevention	
§ 112.11(l), § 112.15(l)	§ 112.7(e)(7)(xiv)	Manifolds	
§ 112.11(m), § 112.15(m)	§ 112.7(e)(7)(xv)	Flowlines, pressure sensing devices	
§ 112.11(n), § 112.15(n)	§ 112.7(e)(7)(xvi)	Piping; corrosion protection	
§ 112.11(o), § 112.15(o)	§ 112.7(e)(7)(xvii)	Sub-marine piping; environmental stresses	
§ 112.11(p), § 112.15(p)	§ 112.7(e)(7)(xviii)	Inspections of sub-marine piping	

In 1995, Congress enacted the Edible Oil Regulatory Reform Act (EORRA), 33 U.S.C. 2720. That statute mandates that most Federal agencies differentiate between and establish separate classes for various types of oils, specifically: animal fats and oils and greases, and fish and marine mammal oils; oils of vegetable origin; petroleum oils, and other non-petroleum oils and greases. In differentiating between these classes of oils, Federal agencies are directed to consider differences in the physical, chemical, biological, and other properties, and in the environmental effects, of the classes. In response to EORRA, as noted above, we have divided the requirements of the rule by subparts for facilities storing or using the various classes of oils listed in that act.

Because at the present time EPA has not proposed differentiated SPCC requirements for public notice and comment, the requirements for facilities storing or using all classes of oil will remain the same. However, we have published an advance notice of proposed rulemaking seeking comments on how we might differentiate among the requirements for the facilities storing or using various classes of oil. 64 FR 17227, April 8, 1999. If after considering these comments, there is adequate justification for differentiation among the requirements for those facilities, we will propose rule changes.

B. Plain Language Format

We have rewritten the SPCC rule in a plain language format to make it clearer and easier to use. A plain language format includes maximum use of the active voice; short, clear sentences; and, in this rule, a summary table of the major regulatory changes. This format is part of the Agency's ongoing efforts in regulatory reinvention. While we have made substantive changes in some provisions, the plain language changes are only editorial. The plain language format used in today's rule may appear different from other rules, but it establishes binding, enforceable legal requirements.

In this preamble, as in the rule text, we often use the pronoun "he" as a generic term. "He" does not necessarily mean a man; it may be a woman, or in some cases, a business organization when referring to an owner or operator.

C. "Should to Shall to Must" Clarification

Background

EPA has always considered that § 112.3 of the SPCC rule requires that SPCC Plans be prepared in accordance with § 112.7, which in turn requires that Plans be prepared in accordance with good engineering practice. However, clarification of the current rule is necessary because of confusion on the part of some facility owners or operators who have interpreted the current rule's use of the words "should" and "guidelines" in § 112.7 as an indication that compliance with the applicable provisions of the rule is optional. The rule used the words "should" and "guidelines" to provide flexibility for facilities with unique circumstances. Those circumstances might be such that mandated regulatory provisions would not be in accord with good engineering practice. Therefore, the rule gave facilities the opportunity to provide alternative methods that achieve equivalent environmental protection, or to show that the provisions were inapplicable based on specific circumstances.

In 1991, we proposed to clarify that misunderstanding by generally substituting ''shall'' in place of ''should'' throughout the reorganized rule. In today's final rule, we have editorially changed ''shall'' to ''must'' in furtherance of the Agency's ''plain language'' objectives. The ''shall'' to ''must'' is not a substantive change, but merely an editorial change. Nor will the change add to the information collection burden. We have always included requirements prefaced by ''should'' in the information collection burden for the rule. We will continue to provide flexibility for an owner or operator who can explain his reasons for nonconformance with rule requirements, and can provide alternate measures from those specified in the rule, which achieve equivalent environmental protection. Section 112.7(a)(2) will provide such flexibility. In the exercise of our authority to inspect facilities and SPCC Plans, we reserve the right to find that such alternate methods do not provide equivalent environmental protection. In such cases, we would require the owner or operator of the facility to amend the SPCC Plan to provide equivalent environmental protection.

Comments. Guidance. Several commenters supported the proposed change. One asked that discretionary provisions might be better placed in a separate guidance document. Several commenters were concerned that there are no guidance documents outlining equivalency as provided in proposed § 112.7(a)(2) and that it may be impossible to prove equivalency to EPA.

PE certification. Other commenters suggested that if the Professional Engineer (PE) certified the Plan as adequate for the facility, then the mandated requirements were unnecessary, as he would have determined that all appropriate equipment and planning is in place.

Substantive change. Some commenters argued that the proposal was a substantive change, contrary to legislative intent, and that we failed to give opportunity for proper notice and comment, as required by the Administrative Procedure Act.

Small production facilities. One commenter suggested that the clarification should not apply to small production facilities, defined as those with less than 3000 barrels of storage capacity, because those facilities would suffer severe hardship as a result.

Response to comments. Guidance. EPA agrees with the comment that recommendations have no place in this rule because we do not wish to confuse the regulated public as to what is mandatory and what is discretionary. Instead, some recommendations are discussed in the preamble to this document, while others can be found in separate guidance documents or policy statements. When the rule or preamble is silent, or no published guidance or policy documents exist, we will generally use industry standards as guidance for rule compliance.

PE certification. While we generally agree that certification by a PE should show that all necessary equipment and planning are in place, we reserve the right to make a determination that additional measures may be necessary to comply with the rule. EPA made it clear in proposed § 112.3(d), which is finalized today, that a PE certification does not relieve the owner or operator of the duty to prepare and fully implement an SPCC Plan in accordance with the rule's requirements.

Substantive change. We disagree that the change is either substantive or contrary to legislative intent. Section 311(j)(1)(C) of the Act authorizes the President and, through delegation, EPA, to establish ''procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such discharges.'' That authority is ample to provide the basis for a mandatory SPCC rule, that is, a rule that establishes ''requirements * * * to prevent discharges.''

We also disagree that the proposed rule failed to provide proper notice and comment. The preamble to the 1991 proposed rule fully explained the rationale for the proposed change (56 FR 54620, October 22, 1991), and numerous commenters responded. Furthermore, we have always interpreted and enforced our rules as mandatory requirements.

EPA recognizes, however, that this clarification may result in certain owners or operators of regulated facilities recognizing for the first time that they have been and are subject to various provisions of part 112. Such owners and operators should, of course, take all necessary steps to come into compliance with this part as soon as possible. In exercising its prosecutorial discretion, the Agency always takes into account the good faith and efforts to comply of an owner or operator who has been in noncompliance with applicable laws and regulations when deciding whether or not to take an enforcement action.

Small production facilities. We disagree that the ''should'' to ''must'' change will generally pose a severe hardship for small production facilities. As noted above, EPA has always interpreted the ''shoulds'' as ''musts.'' Further, when a particular requirement is not feasible for a particular facility, under § 112.7(a)(2) that facility may explain the reasons for nonconformance with the requirement, and provide alternate measures that achieve equivalent environmental protection.

D. Professional Engineers (PEs)

Background. In the preamble to the 1991 proposal (56 FR 54618), EPA posed several questions to commenters regarding how PEs could help to implement the SPCC Plan. An owner or operator of a facility is required to secure the certification of a PE on an SPCC Plan, and on technical amendments to the Plan. By means of this certification, the PE attests that the Plan or the amendment has been prepared in accordance with good engineering practice.

1. State Registration

Background. We solicited comments on the advantages and disadvantages associated with the PE being registered in the State in which the facility is located. EPA noted that ''a requirement that a PE be licensed in the State in which the facility is located would allow the State licensing board to more easily address the actions of the PE under its jurisdiction, and that the PE may have greater familiarity with the State and local requirements related to the facility under review.'' 56 FR 54619.

Comments. Favorable comments. Several commenters supported a requirement that the PE be registered in the State in which the facility is located. The rationales often expressed were that: (1) Letting any PE certify any SPCC Plan effectively removed the PE from the supervision of the State board; and, (2) familiarity with the State and local requirements related to the facility as well as the State itself are essential for viable SPCC Plans. One commenter suggested that when an out-of-State PE prepares the Plan, the Plan should bear the seal of the PE who prepared the Plan along with the seal of a PE registered in the State in which the facility is located, assuring that the proposed Plan conforms to any additional State requirements.

Opposing comments. Opposing commenters argued that: (1) A State licensing board will address the actions of an engineer regardless of the engineer's location when he applies his seal; (2) suggestions that the potential liability of the engineer might be limited if the engineer holds an out-of-State license are specious; (3) SPCC Plan

preparation is a Federal activity, therefore, it is unnecessary to have State registration; and, (4) such a requirement would reduce the available pool of qualified PEs. One commenter volunteered that the proposal was "superfluous" because the practice of engineering in a State without being professionally registered in that State is unlawful in most States.

Response to comments. We agree with commenters that it is unnecessary that the PE be registered or licensed in the State in which the facility is located because any abuses will be corrected by the licensing jurisdiction. We also agree that such a requirement might unnecessarily reduce the availability of PEs and increase the cost of certification without any tangible benefits. The professional liability of a PE would likely be unaffected by the place of his registration. When State law precludes a PE from applying his seal if he is not licensed in that State, the question of State registration becomes moot. However, that is not the case in every State.

We also disagree that if a PE is not licensed in the State, he will be unfamiliar with State and local requirements for the facility. Any PE may become familiar with both Federal and State and local requirements for a facility. Therefore, to require that the PE be registered in the State in which the facility is located would impose unnecessary financial burdens on the facility and would challenge the integrity of the PE. Such a requirement would also reduce the pool of PEs available for facilities.

2. PEs Employed by the Facility

Background. EPA asked whether the rule should specify that the PE not be an employee of the facility or have any other direct financial interest in the facility. This request for comment had its origin in a U.S. General Accounting Office (GAO) report issued on February 22, 1989, "Inland Oil Spills: Stronger Regulation and Enforcement Needed to Avoid Future Incidents" (GAO/RCED–89–65)." The GAO report recommended that EPA evaluate the advantages and disadvantages of requiring facilities to obtain certifications from independent engineers. EPA noted that "not having the PE otherwise associated with the facility may avoid any potential conflicts of interest or appearance of conflicts of interest that could arise from allowing an employee of a regulated party to certify a SPCC Plan." 56 FR 54619. On the other hand, for both the issues of whether to require State registration and whether to allow PEs employed by the facility to certify SPCC Plans, EPA noted that some organizations objected to the proposals as "challenging the integrity of professional engineers." 56 FR 54619. We also pointed out that some professional organizations believe that such requirements "would impose substantial costs without enhancing the integrity of the certification process." 56 FR 54619.

Comments. Favorable comments. Several commenters supported a requirement that the PE not be an employee of the facility or not have a direct financial interest in it. The rationales most often asserted were: (1) A Plan would better satisfy regulatory objectives and better serve the public; (2) the Plan would be less subject to compromise by other factors; (3) Plan certification is less likely to be a coerced or superficial effort, and undue economic and moral pressures would be avoided; (4) more cooperative efforts among regulatory bodies, engineers, and the facility would be possible; (5) more economic and effective Plan development is assured; and, (6) more competent and more professional Plan development is guaranteed.

Opposing comments. Opposing commenters asserted that: (1) Such a proposal would limit the availability of PEs, leading to delays in Plan certification; (2) administrative action to correct abuses would be a better approach; and, (3) such an approach insults the ethical integrity of PE. One commenter suggested that "to suppose a facility employee would break the law and jeopardize his license to practice his profession and do it more willingly than an "independent" engineer has no basis in fact'; (4) an in-house PE may be the person most familiar with the facility; (5) the proposal would place an undue and unnecessary financial burden on the owner or operator of a facility by forcing him to hire an outside engineer; and, (6) it is uncertain whether an independent PE can afford the insurance necessary to certify his work given that the liability incurred might run into the millions of dollars.

Compromise position. One commenter suggested that a compromise position might be that the PE who certifies the Plan would be required to disclose in the Plan certification his relationship to the facility owner, the facility improvements owner, and the facility landowner.

Response to comments. We agree that a proposal to restrict certification by a PE employed by a facility or having a financial interest in it would limit the availability of PEs, possibly leading to delays in Plan certification. Therefore, we will not adopt it. Nor do we favor the proposal to require the PE to disclose his relationship to the facility owner, the facility improvements owner, or the facility landowner. Such disclosure would add no environmental protection to the SPCC certification process. Administrative action to correct abuses would be a better approach. We believe that most PEs, whether independent or employees of a facility, being professionals, will uphold the integrity of their profession and only certify Plans that meet regulatory requirements. We also agree that an in-house PE may be the person most familiar with the facility. EPA believes that a restriction of in-house PE certification might place an undue and unnecessary financial burden on owners or operators of facilities by forcing them to hire an outside engineer.

3. Completion of Testing

Background. The Agency proposed that the PE must attest that required testing has been completed and the Plan meets the requirements of the regulation for the facility. This proposal was advanced to "promote the Agency's intent in the original promulgation of § 112.3(d) that SPCC Plans be certified by a Registered Professional Engineer exercising independent judgment." 56 FR 54619. These new requirements were to be met when a new Plan is prepared after promulgation of the rule, or when an existing Plan is amended, under § 112.5.

Comments. Favorable comments. One commenter supported a requirement that the PE attest to the completion of testing and that the Plan meets regulatory requirements.

Opposing comments. Some opposing commenters believed that the PE should "enumerate all the inspections and tests that have been completed, plus those that should be completed before the facility commences operations and those that should be undertaken periodically after it commences operations." Others believed that completion of required testing is the responsibility of the operator and not the PE. Another commenter believed such a requirement would be impossible, because "required testing may take up to a year to complete."

Response to comments. EPA agrees that the PE is not responsible for certifying that all required testing has been completed. Rather, such responsibility belongs to the owner or operator of the facility. Testing may be ongoing long after the Plan is certified. The PE is responsible for certifying that the Plan is adequate and meets all regulatory requirements, including enumeration of all tests that have been

completed, plus those that should be completed before the facility commences operations and those that should be undertaken periodically after it commences operations. Therefore, we are changing the proposed requirement to a requirement in which the PE attests that the procedures for required inspections and testing have been established, and the Plan is adequate for the facility. *See* the discussion of § 112.3(d), below.

4. Site Visits

Background. We stated that EPA "believes the current regulatory language (*e.g.*, requiring the engineer to examine the facility) clearly requires the certifying Engineer to visit the facility prior to certifying the SPCC Plan." We added that the proposed change "clarifies this requirement by specifying that the Professional Engineer must be physically present to examine the facility." 56 FR 54619.

Comments. Favorable comments. Many commenters favored the requirement that the PE make a site visit prior to certifying a Plan. Those commenters called such a visit "absolutely necessary." Some argued that a generic plan prepared by an engineer who has never seen the facility is unacceptable.

Opposing comments. Opposing commenters asserted that such visits only involve additional costs and duplication of efforts without any tangible benefits. Many opposing commenters argued that customary engineering practice includes the use of engineering technicians, technologists, graduate engineers, and others to prepare preliminary reports, studies, and evaluations. After preparation of these documents, the PE would then perform a careful review of all pertinent material and then sign and seal the appropriate plans and drawings. Other commenters argued that such a requirement would be impractical, particularly at electrical substations, due to their large number.

Particular cases. One commenter urged that small facilities be exempted from the site visit requirement where "a determination is made that sufficient documentation of site characteristics is available for plan certification." That commenter noted that in many instances sufficient information is available from topographic maps, aerial photographs, soil surveys, hydrologic studies, engineering and construction reports, and local operating personnel to eliminate the need for site visits prior to certification. Another commenter urged an exemption for temporary storage facilities because given their emergency nature, certification is impractical. One commenter asked for clarification that the certification of an existing Plan is sufficient until the Plan update is required. Another suggested that the rule should only require that the PE be familiar with the operation and design of the type of facility, and that he would have visited and examined one or more facilities of this type.

Response to comments. In general. EPA agrees that the rule should not necessarily require a site visit by a certifying PE, but we believe that a site visit should occur before the PE certifies the Plan. We have modified proposed § 112.3(d)(ii) to reflect this position. The PE's agent may perform the visit. We agree that customary engineering practice allows someone under the PE's employ such as an engineering technician, technologist, graduate engineer, or other qualified person to prepare preliminary reports, studies, and evaluations after visiting the site. Then the PE could legitimately certify the Plan. Nevertheless, in all cases the PE must ensure that his certification represents an exercise of good engineering judgment. If that requires a personal site visit, the PE must visit the facility himself before certifying the Plan.

Particular cases. EPA agrees that a PE site visit requirement might be impractical at electrical substations, due to their large number. However, the PE need not go. One of his agents may go, and he may review the agent's work. We disagree with commenters who believe that a site visit is unnecessary at small facilities and temporary storage facilities. Site visits are necessary for those facilities to ensure Plan adequacy and to prevent discharges.

EPA has interpreted the current rule language to contain a requirement that the PE examine the facility. Because of the uncertainty concerning the nature of this requirement, however, we will not require documentation of a site visit by a PE or his agent until after the effective date of this rule. We disagree that the rule should only require that the PE be familiar with the operation and design of the type of facility. We also disagree that merely because the PE has visited and examined one or more facilities of a particular type that no site visit is necessary. A facility may have individual characteristics that differ from those of its type in general, and a site visit by a PE or agent may be necessary to detect those characteristics and accommodate them in the Plan. Such individual characteristics include geographic conditions, possible flow paths, facility design and construction, type of containers, product stored, particular equipment, and the integrity of containment at the facility. Therefore, even if a PE has inspected many facilities of a particular type, that fact does not eliminate the need for a site visit at each facility. After the site visit, the PE will have to devise appropriate inspection and testing standards based on the facility's unique characteristics.

E. Electrical Facilities and Other Operational Users of Oil

Background. In 1991, we proposed that certain facilities having equipment containing oil that is used for operational purposes, such as electrical transformers, would not have to comply with secondary containment requirements and certain other provisions proposed in §§ 112.8(c) and 112.9(d) because such facilities are not bulk storage facilities. EPA asked for comment on this and also asked commenters to identify other possible operational uses of oil, other than electrical transformers, that may not currently use secondary containment as a common industry practice and that should not be subject to bulk storage provisions. 56 FR 54623.

Comments. Use of oil. Numerous commenters, especially in the electric utility industry, asserted that EPA has no jurisdiction to regulate the operational use of oil generally, or specifically in electrical transformers, substations, and other equipment. Some manufacturers of other products agreed. They argued that the legislative history of the Act showed no Congressional intent for such regulation. However, many commenters asked EPA specifically to clarify this jurisdictional issue.

Response to comments. Use of oil. We disagree that operational equipment is not subject to the SPCC rule. We have amended § 112.1(b) to clarify that using oil, for example operationally, may subject a facility to SPCC jurisdiction as long as the other applicability criteria apply, for example, oil storage capacity, or location. Such a facility might reasonably be expected to discharge oil as described in § 112.1(b). Therefore, the prevention of discharges from such facility falls within the scope of the statute.

However, we have distinguished the bulk storage of oil from the operational use of oil. We define "bulk storage container" in the final rule to mean any container used to store oil. The storage of oil may be prior to use, while being used, or prior to further distribution in commerce. For clarity, we have specifically excluded oil-filled electrical, operating, or manufacturing equipment from the definition.

Facilities that use oil operationally include electrical substations, facilities containing electrical transformers, and certain hydraulic or manufacturing equipment. The requirements for bulk storage containers may not always apply to these facilities since the primary purpose of this equipment is not the storage of oil in bulk. Facilities with equipment containing oil for ancillary purposes are not required to provide the secondary containment required for bulk storage facilities (§ 112.8(c)) and onshore production facilities (§ 112.9(c)), nor implement the other provisions of § 112.8(c) or § 112.9(c). Oil-filled equipment must meet other SPCC requirements, for example, the general requirements of this part, including § 112.7(c), to provide appropriate containment and/or diversionary structures to prevent discharged oil from reaching a navigable watercourse. The general requirement for secondary containment, which can be provided by various means including drainage systems, spill diversion ponds, etc., will provide for safety and also meet the needs of section 311(j)(1)(C) of the CWA. EPA will continue to evaluate whether the general secondary containment requirements found in § 112.7(c) should be modified for small electrical and other types of equipment which use oil for operating purposes. We intend to publish a notice asking for additional data and comment on this issue.

In addition, a facility may deviate from most SPCC requirements, if the owner or operator explains his reasons for nonconformance and provides equivalent environmental protection by some other means. *See* § 112.7(a)(2). *See also* § 112.7(d).

F. Discretionary Provisions

Background. In the preamble to the 1991 proposal (at 56 FR 54616), we asked for comments as to whether the provisions proposed as recommendations in rule text should be made requirements. We then noted that we were "particularly interested in receiving comments and information on the advisability of establishing" certain provisions as "requirements for large facilities, but as recommendations for small facilities." These provisions were: (1) Proposed § 112.8(d)(4)—"that facilities have all buried piping tested for integrity and leaks annually or have buried piping monitored monthly in accordance with the provisions of 40 CFR part 280." We also recommended that records of testing or monitoring be kept for five years.; and, (2) proposed § 112.8(d)(5)—"that facilities post vehicle weight restrictions to prevent damage to underground piping." Individual proposals will be discussed under their relevant sections in this preamble. Large facilities were defined for this purpose as facilities with more than 42,000 gallons of SPCC-regulated storage capacity. Conversely, we asked whether such provisions should be discretionary for smaller facilities. The rationale expressed in the question was EPA believes that "larger volumes of oil stored at a facility increase the chances of a spill occurring, and that spills from large-capacity facilities may be greater in magnitude than those from smaller facilities, thus posing a greater potential threat to the waters of the United States."

EPA also requested comments on two other practices it proposed as recommendations, but did not include in rule text. Those practices were: (1) "That owners and operators of facilities affix a signed and dated statement to the SPCC Plan indicating that the revision has taken place and whether or not amendment of the Plan is required;" and, (2) "That owners and operators of onshore facilities other than production facilities state the design capabilities of their drainage system in the SPCC Plan if the system is relied upon to control spills or leaks." Concerning the first practice, see also the discussion under § 112.5(b) of today's rule. The rationale for these recommendations was that "these provisions may not for all facilities achieve the standard of provisions based on good engineering practice, which is the basic standard of the regulation. EPA, however believes that implementation of these provisions at most facilities would contribute to the facilities' overall effort to prevent oil discharge and to mitigate those spills that may occur." The Agency also asked whether some of these provisions should be mandatory.

Comments. Large or small facility regulation, in general. EPA received a number of comments on this issue, some directed towards regulation of larger and smaller facilities in general, and others toward specific provisions proposed. Some commenters believed that larger facilities could better bear the costs of regulation than smaller facilities, some of which were financially marginal and might go out of business as a result of environmental regulation.

Storage capacity level. Commenters suggested different storage capacity levels at which to differentiate large from small facilities. Those suggestions ranged from 10,000 to 100,000 gallons in storage capacity. Many, however, supported the 42,000-gallon level.

Other factors. One commenter suggested that other factors such as proximity to navigable waters or environmentally sensitive areas, as well as the use of good engineering practices should be considered in the regulation of facilities. The commenter argues that these factors might avoid overburdening a large facility with a low potential for impact on a navigable water or exempting a small facility with a high potential for impact on a navigable water.

Discretionary provisions. Favorable commenters. Numerous commenters favored discretionary provisions in the interest of maintaining flexibility in the program, noting that what may be appropriate for one facility may not be appropriate for another. Some commenters favored applying discretionary provisions to small facilities only, leaving the provisions as requirements for larger facilities.

Discretionary provisions. Opposing commenters. Some commenters argued that discretionary provisions are inappropriate in a rule as a matter of principle because they complicate mandatory rule documents and enforcement, and they confuse the regulated community. Yet others urged that such provisions were unnecessary in any case because they believe that no risks exist for which the discretionary provisions were proposed.

Response to comments. We will discuss specific comments under the discussion of specific sections. See section IV.G of today's preamble for a discussion of the "Design Capabilities of Drainage Systems, other than Production Facilities." Our general discussion follows.

Large or small facility regulation, in general. We have decided not to regulate facilities differently based merely on storage capacity, provided that the capacity is above the regulatory threshold of over 1,320 gallons. This decision is based on environmental reasons. Small discharges of oil that reach the environment can cause significant harm. Sensitive environments, such as areas with diverse and/or protected flora and fauna, are vulnerable to small spills. EPA noted in a recent denial of a petition for rulemaking: "Small spills of petroleum and vegetable oils and animal fats can cause significant environmental damage. Real-world examples of oil spills demonstrate that spills of petroleum oils and vegetable oils and animal fats do occur and produce deleterious environmental effects. In some cases, small spills of vegetable oils can produce more environmental harm than numerous large spills of petroleum

oils.'' 62 FR 54508, 54530, October 20, 1997. Describing the outcome of one small spill of 400 gallons of rapeseed oil into Vancouver Harbor, we noted that '' * * * 88 oiled birds of 14 species were recovered after the spill, and half of them were dead. Oiled birds usually are not recovered for 3 days after a spill, when they become weakened enough to be captured. Of the survivors, half died during treatment. The number of casualties from the rapeseed oil spills was probably higher than the number of birds recovered, because heavily oiled birds sink and dying or dead birds are captured quickly by raptors and scavengers.'' 62 FR 54525.

A small discharge may also cause harm to human health or life through threat of fire or explosion, or short-or long-term exposure to toxic components.

Other factors. Finally, EPA notes that the rule affords flexibility to an owner or operator of a facility to design a Plan based on his specific circumstances. It allows him to choose methods that best protect the environment. It permits deviations from most of the mandatory substantive requirements of the rule when the facility owner or operator can demonstrate a reason for nonconformance, and can provide equivalent environmental protection by other means. Consequently, both small and large facilities have the opportunity to reduce costs by alternative methods if they can maintain environmental protection. Because smaller facilities may require less complex plans than larger ones, their costs may be less.

Discretionary provisions. We agree that discretionary provisions have no place in this rule because we do not wish to confuse the regulated community and complicate enforcement by blurring what is mandatory and what is discretionary. We will provide guidance or policy statements on various issues, as necessary, that will incorporate some or all of these recommendations. In the absence of such guidance or policy statements, you should look to current industry standards for guidance on technical issues. See also our discussion of industry standards and good engineering practice under section IV.K of today's preamble and under § 112.3(d) in section V of today's preamble.

G. Design Capabilities of Drainage Systems, Other than Production Facilities

Background. In the 1991 preamble, we asked for comments on, but did not propose, a provision that owners or operators of onshore facilities other than production facilities describe the design capabilities of their drainage systems in the SPCC Plan if the system is relied upon to control spills or leaks. 56 FR 54616, October 22, 1991. See also section IV.F of today's preamble for a discussion of other ''Discretionary Provisions.''

Comments. Favorable comments. Commenters favoring such a requirement asserted that such a description would help identify all paths of escape for discharges at a facility, assess the spill retention capacity of the facility's containment system, and identify the risks to the public of a discharge. Those commenters generally believed that the Professional Engineer should develop the description for the Plan.

Opposing comments. Commenters opposing making the recommendation a requirement argued that it was unnecessary because the rules already require certain descriptions of design capabilities of drainage systems. They asserted that such a requirement would be redundant in that if a drainage system is relied upon to control spills or leaks, then it must have design capabilities to control such spills or leaks.

Response to comments. The question of description of the design capabilities of drainage systems for onshore facilities other than production facilities is adequately covered by rules pertaining to drainage. *See*, for example, §§ 112.7(a)(3) and (**4**), 112.7(b), 112.8(b), and 112.10(c). Therefore, we will not promulgate any additional requirements on this subject. These provisions generally require that a facility owner or operator design the facility drainage system to prevent discharges, or if prevention fails, to contain the discharge within the facility.

H. Compliance Costs

Background. We provided an extensive discussion of the costs and benefits of the proposed 1991 rule. 56 FR 54628–54629, October 22, 1991. We requested comments in the 1991 preamble concerning the new compliance costs associated with the proposed rule.

Comments. EPA received numerous comments on this issue. The overwhelming majority of commenters asserted that the proposed rule would impose costs that few could bear. Many argued that such costs were unnecessary or should be applied to large facilities only.

Response to comments. EPA considered cost factors in finalizing the requirements in this rule. We believe that facilities in compliance with the current rule will incur minimal additional cost due to the revisions in this rule. Many of the provisions we proposed in 1991 that commenters believed were too costly were not finalized in this rule. In addition, in today's rule, we have provided flexibility in several ways. Many of the provisions we proposed in 1991 that commenters believed were too costly were not finalized in this rule. In addition, in the deviation provision, § 112.7(a)(2), we permit you to substitute alternate measures that provide equivalent environmental protection if you can explain a reason for nonconformance with the prescribed requirement. We also rely on the use of industry standards in many provisions, rather than mandating any particular procedure, or any particular monitoring or inspection schedule. We assume that most facilities follow industry standards, and therefore will not incur additional costs for many provisions where they do. We recognize, however, that to the extent any facility does not follow current industry standards, it might incur additional costs. Furthermore, we are finalizing other provisions in this rule which will reduce burden in other ways and will exempt certain facilities from having to prepare an SPCC or FRP Plan. EPA has also prepared an assessment of the costs of rule compliance, which is discussed in part VI.F (Regulatory Flexibility Act) of this preamble, and we have included the specific comments related to costs and our responses in relevant sections of this preamble.

I. Contingency Planning and Notification

Background. We requested comments in the 1991 preamble on spill contingency planning needs (at 56 FR 54615) and on proposed facility notification requirements (at 56 FR 54614). You will find a detailed discussion of contingency requirements and facility notification requirements (§ 112.7(d) and proposed § 112.1(e)) in Section V of today's preamble. On those subjects, we briefly summarize the comments and our responses below.

Comments. Contingency planning. Many commenters supported the 1991 proposal. Opposing commenters suggested that such planning should be discretionary because not all facilities need such planning, or that facilities be allowed to use contingency plans prepared for other purposes. Others thought the proposal was premature as we had not at the time finalized response planning requirements in § 112.20. Some said that contingency planning was not practicable because

the costs are too high, but these commenters did not provide specific cost estimates.

Notification. A number of commenters favored the proposal, including some industry commenters. Most industry commenters opposed the proposal either in part or in its entirety. Commenters who opposed the proposal in its entirety asserted that it was unnecessary, largely because they believed the information sought might be better obtained from other sources, such as State sources or SARA Title III reports.

Response to comments. Contingency planning. Contingency planning is necessary whenever you determine that a secondary containment system for any part of the facility that might be the cause of a discharge as described in § 112.1(b) is not practicable. This requirement applies whether the facility is manned or unmanned, urban or rural, and for large and small facilities. Because we have not finalized either the 1991 or 1993 contingency plan proposals, there are no new costs. We note that we finalized response planning requirements in 1994. Contingency plans prepared for other purposes are acceptable for SPCC purposes if they satisfy all SPCC requirements.

Notification. Withdrawal of proposal. We have decided to withdraw the proposed facility notification requirement because we are still considering issues associated with establishing a paper versus electronic notification system, including issues related to providing electronic signatures on the notification. Should the Agency in the future decide to move forward with a facility notification requirement, we will repropose such requirement.

J. Reproposal

Background: In the 1997 proposal, we stated that we would finalize the 1991 and 1993 proposals without seeking additional comments on those proposals.

Comments: Some commenters suggested that we repropose the 1991 proposal ''so that the public can view the proposed changes in a comprehensive manner.'' Other commenters suggested that the time that has elapsed, the changes in operational procedures of the oil and gas industry which have improved the degree of environmental protection, and the new information EPA obtained from its tank survey, justified reproposal. Others cited changes in oil industry personnel as a reason to repropose the rule. Some commenters believed that the implementation of the Facility Response Plan (FRP) rule alone requires us to solicit additional comments concerning the SPCC proposals.

Response: Additional comments or reproposal. We believe it is unnecessary to repropose the 1991 and 1993 proposals because of mere passage of time. We received numerous comments on every side of most issues. In developing this final rule, we have considered changes that have taken place in the oil industry, industry standards, and regulations that may affect the SPCC rule. We have also considered changes in the various industries which comprise the universe of SPCC facilities which have occurred since our original proposals. We encourage the use of industry standards to implement the rule, without incorporating any particular standard into the rule, thereby averting possible obsolescence of those standards. We used the results of our 1995 SPCC facility survey to develop our 1997 proposed rule. These results are also part of the administrative record for this rulemaking. We considered all the comments we received in 1997, even if they dealt with issues proposed in 1991 or 1993. We have also considered and responded to all of the comments received in 1991 and 1993 in their respective Comment Response Documents or in the preamble to today's final rule.

Personnel changes. In developing this final rule, as noted above, we have considered changes that have taken place in the oil industry, industry standards, and regulations that may affect the SPCC rule. For the past 26 years, owners and operators of regulated facilities have been responsible for training their personnel in applicable regulations, such as 40 CFR part 112. Such responsibility is in effect now, and will continue under the revised rule. New companies and new personnel of those companies are on notice as to applicable rules and proposals. They have also had the opportunity to comment on the 1997 proposal. Furthermore, we have considered cost implications for all three proposals which we are finalizing today.

Response plan requirements. We have no plans to require SPCC facilities for which secondary containment is not practicable to develop response plans. However, we have withdrawn § 112.7(d) as proposed in 1993. Only a contingency plan following the provisions of 40 CFR part 109 and compliance with other provisions of § 112.7(d) is necessary when secondary containment is impracticable. Only onshore facilities that meet the criteria of substantial harm and/or significant and substantial harm facilities need to comply with the FRP requirements in 40 CFR 112.20–21.

K. Industry Standards

Throughout the rule we generally allow for the application of industry standards where the standards are both specific and objective, and their application may reduce the risk of discharges to and impacts to the environment. We recognize that as technology advances, specific standards change. By referencing industry standards throughout the preamble, we anticipate that the underlying requirements of the rule itself will change as new technology comes into use without the need for further amendments. We believe that industry standards today represent good engineering practice and generally are environmentally protective. However, as under the current rule, if an industry standard changes in a way that would increase the risk of a discharge as described in § 112.1(b), EPA will apply and enforce standards and practices that protect the environment, rather than the less protective industry standard.

Under the terms of this rule, when there is no specific and objective industry standard that applies to your facility (for example, whether there is no standard or a standard that uses the terms ''as appropriate,'' ''often,'' ''periodically,'' and so forth), you should instead follow any specific and objective manufacturer's instructions for the use and maintenance or installation of the equipment, appurtenance, or container. If there is neither a specific and objective industry standard nor a specific and objective manufacturer's instruction that applies, then it is the duty of the PE under § 112.3(d) to establish such specific and objective standards for the facility and, under § 112.3(d), he must document these standards in the Plan. If the PE requires the use of a specific standard for implementation of the Plan, the owner or operator must also reference that standard in the Plan.

Throughout this preamble, we list industry standards that may assist an owner or operator to comply with particular rules. The list of those standards is merely for your information. They may or may not apply to your facility, but we believe that their inclusion is helpful because they generally are applicable to the topic referenced. The decision in every case as to the applicability of any industry standard will be one for the PE.

For your convenience, we are including a list of organizations below

that may be helpful in the identification and explanation of industry standards.

Name	Address	Phone #	Web Site/E-mail
American National Standards Institute (ANSI).	11 West 42nd Street, New York, NY 10036.	212–642–4900 212–398–0023 fax.	*www.ansi.org* *ansionline@ansi.org*
American Petroleum Institute (API)	1220 L Street, NW Washington, DC 20005.	202–682–8000 202–682–8232 fax.	*www.api.org* *standards@api.org* *standards2@api.org*
American Society of Mechanical Engineers (ASME).	Three Park Avenue New York, NY 10016–5990.	800–843–2763 973–882–1717 fax.	*www.asme.org* *infocentral@asme.org*
American Society for Nondestructive Testing (ASNT).	PO Box 28518, 1711 Arlingate Lane Columbus, OH 43228–0518.	800–222–2768 614–274–6899 fax	*www.asnt.org*
American Society for Testing and Materials (ASTM).	100 Barr Harbor Drive, West Conshohocken, PA 19428–2959.	610–832–9585 610–832–9555 fax.	*www.astm.org* *webmastr@astm.org.*
Building Officials and Code Administrators (BOCA) International.	4051 West Flossmoor Road Country Club Hills, IL 60478.	708–799–2300 .. 708–799–4981 fax.	*www.bocai.org* *webmaster@bocai.org.*
International Code Council (ICC)	5203 Leesburg Pike, Suite 708 Falls Church, VA 22041.	703–931–4533 703–379–1546 fax.	*www.intlcode.org* *staff@intlcode.org.*
International Conference of Building Officials (ICBO).	5360 Workman Mill Road Whittier, CA 90601–2298.	888–699–0541 888–329–4220 fax.	*www.icbo.org*
International Fire Code Institute (IFCI) ...	5360 Workman Mill Road Whittier, CA 90601–2298.	562–699–0124 562–699–8031 fax.	*www.ifci.org* *webmaster@icbo.org*
Manufacturers Standardization Society of The Valve and Fittings Industry Inc. (MSS).	127 Park Street, N.E. Vienna, VA 22180–4602.	703–281–6613 703–281–6671 fax.	*www.mss-hq.com* *info@mss-hq.com*
National Association of Corrosion Engineers (NACE).	1440 South Creek Drive Houston, TX 77084.	281–228–6200 281–228–6300 fax	*www.nace.org*
National Fire Protection Association (NFPA).	1 Batterymarch Park PO Box 9101 Quincy, MA 02269–9101.	617–770–3000 617–770–0700 fax.	*www.nfpa.org* *hazchem@nfpa.org*
Petroleum Equipment Institute (PEI)	P.O. Box 2380 Tulsa, OK 74101–2380	918–494–9696 918–491–9895 fax.	*www.pei.org* *pei@peinet.org.*
Southern Building Code Congress International (SBCCI).	900 Montclair Road Birmingham, AL 35213–1206.	205–591–1853 205–591–0775 fax.	*www.sbcci.org* *info@sbcci.org*
Southwest Research Institute (SwRI)	P.O. Box Drawer 28510 San Antonio, TX 78228–0510.	210–684–5111	*www.swri.org* *action67@swri.org*
Steel Tank Institute (STI)	570 Oakwood Road Lake Zurich, IL 60047.	847–438–8265 .. 847–438–8766 fax.	*www.steeltank.com* *ankiefer@steeltank.com*
Underwriters Laboratories (UL)	333 Pfingsten Road Northbrook, IL 60062–2096.	847–272–8800 847–272–8129 fax.	*www.ul.com* *northbrook@ul.com*
Western Fire Chiefs Association (WFCA)	300 N. Main St. #25 Fallbrook, CA 92028.	760–723–6911 760–723–6912 fax.	*www.wfca.com* *wfcadmin@wfca.com*

V. Section by Section Analysis (Includes: Background, Comments, and Response to Comments)

Subpart A—Applicability, definitions, and general requirements for all facilities

Background. In the reformatted rule, subpart A defines the applicability of part 112, provides definitions applicable to all subparts, and prescribes general requirements that are applicable to all facilities subject to part 112.

Section 112.1(a)(1)—General Applicability of the Rule

Background. We have redesignated § 112.1(a) as § 112.1(a)(1) due to the addition of a new paragraph (a)(2). In 1991, we proposed changes in § 112.1(a) to conform to the 1977 CWA amendments. Those amendments extended the geographic scope of EPA's authority under CWA section 311. Formerly the geographic scope of the rule extended only to navigable waters of the United States and adjoining shorelines. The final rule extends the geographic scope of EPA's authority beyond discharges to navigable waters and adjoining shorelines to include a discharge 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). Hereinafter, a discharge as described above in quantities that may be harmful is also referred to as "a discharge as described in § 112.1(b)."

Comments. Geographic scope of rule. One commenter wrote to support the geographic extension of the rule, noting that the extended definition "will allow for more clarity in determining which facilities are subject to SPCC requirements."

Natural resources. Another commenter was concerned that the extension of the rule to facilities with the potential to affect natural resources "would bring under the scope of 40 CFR 112 a significant number of operating facilities which did not previously require SPCC plans." Still another commenter proposed limiting the scope of natural resource jurisdiction under the rule to resources under the Magnuson Fishery and Conservation Act to avoid "another unnecessary workload on the judicial system over the years."

Response to comments. Geographic scope of rule. EPA believes that the geographic extension of the rule to agree with statutory amendments is the proper course, and has finalized the rule as proposed.

Natural resources. Limiting the scope of natural resource jurisdiction under the rule to natural resources under the Magnuson Fishery Conservation and Management Act would be inconsistent with this statutory language. We also believe that few, if any new facilities, will be subject to the rule because of its extension to facilities with the potential to affect certain natural resources. We believe that most affected facilities are either already subject to the rule, or not subject to our jurisdiction due to a Memorandum of Understanding between EPA, the U.S. Department of Transportation (DOT), and the U.S. Department of the Interior (DOI), which assigns jurisdiction over most of those facilities to DOT or DOI. See 40 CFR part 112, Appendix B.

Editorial changes and clarifications. While revisions to the rule published today are not retroactive, any violation of the current rule which occurs before the effective date of today's rule is subject to enforcement and penalties.

Section 112.1(a)(2)—Number and Gender

Background. We added a new § 112.1(a)(2) to make clear that words in the singular include the plural, and words in the masculine include the feminine, and vice versa. This amendment is for clarification purposes only.

Section 112.1(b)—Facilities Covered by the Rule—Non-Transportation-Related Facilities

Background. We have redesignated this section to add four new paragraphs. This section describes generally the type of facilities which are subject to the SPCC rule.

In 1991, EPA proposed changes in § 112.1(b) to reflect changes in the geographic scope of EPA's authority under CWA section 311, as described in the discussion under § 112.1(a)(1). EPA also proposed to change the phrase "harmful quantities" to "quantities that may be harmful, as described in part 110." Amendments to the CWA also reflected the broadening of quantities that may be harmful to include those not only harmful to the "public health or welfare," but also to the environment.

Comments. Facilities. Several commenters argued that EPA jurisdiction, under statutory authority, does not extend to facilities, merely to requirements for oil spill prevention and containment equipment. The commenters' argument noted that the statute doesn't mention jurisdictional criteria relating to proximity to water or oil storage capacity, only EPA rules do. Therefore, the commenters argued, if EPA is successful in its assertion of facility regulation, then every pipe, valve, meter, and flange on the wellsite along with tubing and casing in the hole, stock tanks, drainage ditches, and roads are all subject to EPA jurisdiction and specifications. More importantly, they argued, every facility, in every industry, which at some time or other handles oil or hazardous substances could be subject to EPA rules concerning its spill prevention and containment procedures, methods, or equipment.

Use of oil. Numerous commenters, especially in the electric utility industry, asserted that EPA has no jurisdiction to regulate the operational use of oil generally, or specifically in electrical transformers, substations, and other equipment. Some manufacturers of other products agreed. They argued that the legislative history of the Act showed no Congressional intent for such regulation. However, many commenters asked EPA specifically to clarify this jurisdictional issue.

Distance to navigable waters. Two commenters proposed that we exempt from the rule facilities more than one mile from surface waters or those located outside the coastal zone.

Response to Comments: Facilities. We disagree that our authority does not extend to facilities. Section 311(j)(1)(C) of the statute authorizes and requires the President (and EPA, through delegation in Executive Order 12777, 56 FR 54757, October 22, 1991) to issue regulations consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, and consistent with maritime safety and with marine and navigation laws, which establish "procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore and offshore facilities, and to contain such discharges." This language authorizes the President to issue oil spill prevention rules which pertain to onshore facilities and offshore facilities and not just "equipment."

In order to fulfill the statutory mandate, it is necessary to regulate the facilities from which discharges emanate. Moreover, although the term "facility" is not defined in the statute, both "onshore facility" and "offshore facility" are defined terms in CWA section 311. They have also been defined terms in the SPCC rule since its inception in 1974. In the 1991 proposal, EPA proposed a definition of "facility" to implement the CWA. That definition was based on a Memorandum of Understanding (MOU) between the Secretary of Transportation and the EPA Administrator dated November 24, 1971 (36 FR 24080). The MOU, which has been published as Appendix A to part 112 since December 11, 1973 (38 FR 34164, 34170), defines in detail what constitutes a facility. Thus, there has long been a common understanding of the term. That understanding has been reinforced by frequent use of the term in context within the SPCC rule since it became effective in 1974. To promote clarity and to maintain all definitions in one place, the proposed definition has been finalized in this rulemaking.

While section 311(j)(1)(C) of the Act may not explicitly mention jurisdictional criteria, section 311(b) of the Act does. Section 311(b) establishes as the policy of the United States that there shall be "no discharges of oil or hazardous substances into or upon the navigable waters of the United States, 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 which 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)." Thus, the location or "jurisdictional" criteria contained in § 112.1(b) are appropriate for inclusion in the rule.

Use of oil. We disagree that operational equipment is not subject to the SPCC rule. We have amended § 112.1(b) to clarify that using oil, for example operationally, may subject a facility to SPCC jurisdiction as long as the other applicability criteria apply, for example, oil storage capacity, or location. Such a facility might reasonably be expected to discharge oil as described in § 112.1(b). Therefore, the prevention of discharges from such facility falls within the scope of the statute.

However, we have distinguished the bulk storage of oil from the operational use of oil. We define "bulk storage container" in the final rule to mean any container used to store oil. The storage of oil may be prior to use, while being used, or prior to further distribution in commerce. For clarity, we have specifically excluded oil-filled electrical, operating, or manufacturing equipment from the definition.

Facilities that use oil operationally include electrical substations, facilities containing electrical transformers, and certain hydraulic or manufacturing equipment. The requirements for bulk storage containers may not always apply to these facilities since the primary purpose of this equipment is not the storage of oil in bulk. Facilities with equipment containing oil for ancillary purposes are not required to provide the secondary containment required for bulk storage facilities (§ 112.8(c)) and onshore production facilities (§ 112.9(c)), nor implement the other provisions of § 112.8(c) or § 112.9(c). Oil-filled equipment must meet other SPCC requirements, for example, the general requirements of this part, including § 112.7(c), to provide appropriate containment and/or diversionary structures to prevent discharged oil from reaching a navigable watercourse. The general requirement for secondary containment, which can be provided by various means including drainage systems, spill diversion ponds, etc., will provide for safety and also the needs of section 311(j)(1)(C) of the CWA.

In addition, a facility may deviate from any inappropriate SPCC requirements, if the owner or operator explains his reasons for nonconformance and provides equivalent environmental protection by some other means. See § 112.7(a)(2). See also § 112.7(d).

Distance to navigable waters. We do not believe that any rule which exempts facilities beyond any particular distance meets the intent of the statute. The locational standard in the rule is whether there is a reasonable possibility of discharge in quantities that may be harmful from the facility. A facility that is more than one mile from navigable waters might well fit within that standard. For example, piping or drainage from that facility might lead directly to navigable water. If discharged oil may reach or does reach navigable waters, adjoining shorelines, or protected resources, the distance which the discharged oil travels is irrelevant.

Editorial changes and clarifications. In the proposed rule, this paragraph was designated as §§ 112.1(b) and 112.1(b)(1). We have combined the paragraphs and added two new paragraphs. The new paragraphs describe the types of containers subject to the rule, which in addition to the two paragraphs we already proposed, better describe those containers. We also changed plural references in the proposal to singular throughout the section.

Section 112.1(b)(1)—Aboveground Storage Containers

Background. We added this paragraph to clarify that aboveground storage containers are a subset of the containers subject to the rule. In 1991, we noted that containers used for standby storage, temporary storage, or containers that are not permanently closed, are subject to the rule. We also noted that bunkered tanks and partially buried tanks are subject to the rule. The inclusion of this paragraph and paragraph (b)(2), which refers to completely buried tanks, completes the universe of containers subject to the rule.

Section 112.1(b)(2)—Completely Buried Tanks

Background. We added this paragraph to clarify that completely buried tanks are a subset of the containers subject to the rule. See also the discussion under § 112.1(b)(1).

Section 112.1(b)(3)—Standby, Temporary, or Seasonal Storage Facilities

Background. We proposed in 1991 to clarify that tanks used for standby, temporary, or seasonal storage, or that are not otherwise permanently closed, are subject to the SPCC rule. The Agency noted that such tanks are not permanently closed and can reasonably be expected to experience a discharge as described in § 112.1(b). 56 FR 54617. The facilities described in § 112.1(b)(3) are a subset of the facilities described in § 112.1(b)(1) and (b)(2).

Comments. One commenter asserted that temporarily closed tanks should be exempted from the rules because they are required to be drained and, while awaiting temporary closure, are no threat to the environment through oil spills. Another commenter urged that temporary storage facilities should be exempted from the SPCC rule, and handled under the Facility Response Plan (FRP) rules, found at 40 CFR 112.20–21. A third commenter argued that frac tanks, used to store oil for the short periods of time while maintenance or workover operations are underway, should be exempted from the rule because their use is of short duration and does not necessarily increase the potential for discharge. Another commenter stated that it would be impractical to maintain an up-to-date SPCC Plan for temporary storage at remote parts of a large mining operation.

Response to comments. If a tank is not permanently closed, it is still available for storage and the possibility of a discharge as described in § 112.1(b), remains. Nor does a short time period of storage eliminate the possibility of such a discharge. Therefore, a prevention plan is necessary. A tank closed for a temporary period of time may contain oil mixed with sludge or residues of product which could be discharged. Discharges from these facilities could cause severe environmental damage during such temporary storage and are therefore subject to the rule. As to the argument that it is impractical to maintain an up-to-date Plan for temporary facilities at remote parts of mining sites, we disagree. Plans for such storage are analogous to or may be Plans for mobile facilities, which may be general Plans, but still provide environmental protection against a discharge as described in § 112.1(b).

Editorial changes and clarifications. In the proposed rule, this paragraph was designated as § 112.1(b)(2). We have redesignated it as § 112.1(b)(3).

Section 112.1(b)(4)—Bunkered, Partially Buried, and Vaulted Tanks

Background. In 1991, we proposed to clarify that bunkered tanks, partially buried tanks, and tanks in subterranean vaults are considered aboveground tanks for purposes of the SPCC rule. The tanks or containers in these facilities are a subset of the facilities described in § 112.1(b)(1). The Agency explained that compared to completely buried tanks, discharges from these tanks are more likely to enter surface waters regulated under the CWA. 56 FR 54626.

Comments. Partially buried and bunkered tanks. A commenter suggested that partially buried and bunkered tanks should be considered underground storage tanks (USTs) and regulated under that program because ten percent

or more of the product is below grade either in the tank or in the pipeline. The commenter argued that tanks in compliance with the UST program, found at 40 CFR part 280, would not pose a significant threat to the environment. In fact, the commenter argued, they might be less likely to cause a spill than one in compliance with the SPCC rule. The commenter further argued that dual regulation would be unnecessarily burdensome without providing any additional environmental protection.

Vaulted tanks. Several commenters asserted that since vaulted tanks are already regulated by fire and safety authorities, they should not be regulated under the SPCC program. Others argued that vaulted tanks meeting the technical requirements of 40 CFR part 280, or which have engineering controls designed to contain product released from failure or overfill, should likewise be exempted from the SPCC rule. These commenters asserted that a discharge from such tanks would not reach water.

Response to comments. Partially buried and bunkered tanks. We disagree that partially buried tanks and bunkered tanks should be considered completely buried tanks, and therefore excluded from SPCC provisions. The rules differ in important aspects. Tanks which are partially underground pose a risk of a discharge as described in § 112.1(b), which could have an adverse impact on navigable water, adjoining shorelines, or affected resources. Some tanks that are not completely buried contain engineering controls designed to prevent discharges. However, such controls may fail due to human or mechanical error and cause severe environmental damage. Such tanks may suffer damage caused by differential corrosion of buried and non-buried surfaces greater than completely buried tanks, which could cause a discharge as described in § 112.1(b).

Such tanks are also not subject to secondary containment requirements under part 280 or a State program approved under 40 CFR part 281. There may also be accidents during loading or unloading operations, or overfills resulting in a discharge to navigable waters and adjoining shorelines. Furthermore, a failure of such a tank (caused by accident or vandalism) would be more likely to cause a discharge as described in § 112.1(b). We will, however, accept UST program forms, e.g., the Notification for Underground Storage Tanks, EPA Form 7530–1, or approved State program equivalents, insofar as such forms contains information relevant to the SPCC program. For example, the UST form (item 12) contains information regarding corrosion protection for steel tanks and steel piping which would be relevant for SPCC purposes. Other items on the form may also be relevant for SPCC purposes. We are, however, excluding from the rule completely buried storage tanks (including connected underground piping, underground ancillary equipment, and containment systems) that are currently subject to all of the technical requirements of 40 CFR part 280 or 281. *See* § 112.1(d)(4).

Vaulted tanks. Vaulted tanks are generally excluded from the scope of 40 CFR part 280. The definition of "underground storage tank" at 40 CFR 280.12(i) excludes from its scope a "storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor." These tanks might reasonably experience a discharge as described in § 112.1(b). Therefore, it is reasonable that they be within the scope of part 112. Merely because these tanks are the subject of local fire and safety regulations does not guarantee that there will be adequate environmental protection to prevent a discharge as described in § 112.1(b), because that is not the purpose of those regulations. Such codes may provide lesser protection than part 112. For example, NFPA 30:2–3.4.3(b) specifically indicates that a dike need only provide containment for the largest tank, while part 112 requires freeboard for precipitation.

Editorial changes and clarifications. In the proposed rule, this paragraph was designated as § 112.1(b)(3). We have redesignated it as § 112.1(b)(4). Section 112.1(b)(3) of the proposed rule uses the term "aboveground storage containers," in place of "aboveground storage tanks." *See 56* FR 54630. We continue to use "containers" in the final rule. We deleted the word "subterranean," which modified vaulted tanks in the proposed rule, because vaulted tanks are considered aboveground tanks under this rule whether they are subterranean or not.

Section 112.1(c)—Federal Agencies—Applicability of Rule

Background. In 1991, we republished the already existing provisions of § 112.1(c), which provide that agencies, departments, and instrumentalities of the Federal government are subject to the rule to the same extent as any person, except for the provisions relating to civil penalties. The provision relating to civil penalties was rescinded on March 11, 1996, because it no longer accurately reflected the penalties provided for under section 311(b) of the Act, as amended by OPA. 61 FR 9646. Therefore, we have reserved § 112.6 for future use.

Comments. One commenter suggested that Federal agencies are subject to civil penalties which are imposed under the CWA—including fines.

Response to comments. EPA disagrees that Federal agencies are subject to penalties or fines under the CWA because the Federal government is not a "person" under sections 311(a)(7) or 502 of the CWA. Only "persons" (including owners or operators and persons in charge) are subject to such penalties. Therefore, although Federal agencies must comply with requirements of a CWA section 311 rule in accordance with CWA section 313, they are not subject to civil or criminal penalties or fines. *See U.S. Department of Energy* v. *Ohio,* 503 U.S. 607, 618 (1992) (because the CWA does not define "person" to include the United States, the civil penalty provisions are not applicable).

Section 112.1(d)—Exemptions From Applicability

Section 112.1(d)(1)—Exemptions Based on Jurisdiction

Section 112.1(d)(1)(i)—Exemptions Based on Location

Background. In 1991, we described the facilities, equipment, and operations that are exempt from the SPCC rule because they are not subject to the jurisdiction of EPA under section 311(j)(1)(C) of the Act. These facilities include those which, due to their location, could not be reasonably expected to have a discharge as described in § 112.1(b).

In making the determination of whether there is a reasonable possibility of a discharge as described in § 112.1(b), we proposed that you may consider only the geographical and locational aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, *etc.*). We proposed that you could not consider manmade structures such as dikes, equipment, or other structures which may serve to restrain, hinder, or otherwise contain a discharge as described in § 112.1(b), in making that same determination.

Comments. Geographic scope of rule. One commenter agreed that the extension of the geographic scope of the rule will allow for more clarity in determining which facilities are subject to SPCC requirements. The commenter added that the inclusion of natural

resources sets the stage for the implementation of Natural Resource Damage Assessments, as required by the Oil Pollution Act of 1990.

Manmade structures. Other commenters argued that EPA should modify its rules to provide that a facility with no reasonable possibility of discharge because of some combination of natural and manmade features, which are present for operational rather than pollution prevention purposes, should be excluded from the scope of the rule. Another commenter urged that the rule allow consideration of manmade structures where the structures are inherent in the design of the facility and serve functional and operational purposes distinct from the containment of oil spills.

Groundwater. Another commenter argued that Congress intended for EPA to develop SPCC requirements that prevent releases to groundwater, in addition to requirements that prevent releases to navigable water. At a minimum, that commenter argued, § 112.1(d)(1)(i) should contain language stating that clear hydrologic connections between groundwater underlying a facility and navigable waters require a facility to develop and implement an SPCC Plan. Yet another commenter, in opposing exemption of USTs from the SPCC program noted that groundwater eventually becomes surface water. The commenter added that, hydrologically, oil released into underground waters may migrate to surface water within minutes or months. The commenter argued that in the absence of emergency response provisions, some USTs could damage the nation's ground and surface water resources.

Response to comments. Geographic scope of rule. We also believe that few, if any, new facilities will be subject to the rule because of its extension to facilities with the potential to affect certain natural resources. We believe that most affected facilities are either already subject to the rule, or not subject to our jurisdiction due to a Memorandum of Understanding between EPA, the U.S. Department of Transportation (DOT), and the U.S. Department of the Interior (DOI), which assigns jurisdiction over most of those facilities to DOT or DOI. See 40 CFR part 112, Appendix B.

We have amended this provision to be consistent with the revised statutory language found in sections 311(b)(1) and (c)(1)(A) of the CWA. This rule focuses on preventing discharges to navigable waters, adjoining shorelines, the exclusive economic zone, and natural resources belonging to, appertaining to, or under the exclusive jurisdiction of the United States. Once a prohibited discharge of oil occurs and affects such natural resources, the NRDA provisions of OPA sections 1002(b)(2)(A) and 1006 apply. The National Oceanographic and Atmospheric Administration has promulgated a set of regulations which govern the process for conducting NRDAs under the OPA. 15 CFR part 990.

Manmade structures. To allow consideration of manmade structures (such as dikes, equipment, or other structures) to relieve a facility from being subject to the rule would defeat its preventive purpose. Because manmade structures may fail, thus putting the environment at risk in the event of a discharge, there is an unacceptable risk in using such structures to justify relieving a facility from the burden of preparing a prevention plan. Secondary containment structures should be part of the prevention plan.

Groundwater. EPA agrees with the commenter that groundwater underlying a facility that is directly connected hydrologically to navigable waters could trigger the requirement to produce an SPCC Plan based on geographic or locational aspects of the facility. *See* the discussion below for tanks regulated under 40 CFR part 280 or under a State program approved under 40 CFR part 281.

EPA does not agree with the commenter that 40 CFR part 280 and a State program approved under 40 CFR part 281 (the rules governing most completely buried tanks) lack adequate emergency response provisions for regulated tanks and piping. 40 CFR part 280 and State programs approved under 40 CFR part 281 require corrective action, reporting, and recordkeeping requirements for any release from regulated tanks and piping. Also, 40 CFR parts 280 and 281 require various measures intended to prevent contamination that could result from releases from regulated tanks and piping. Although groundwater underlying a facility may eventually connect hydrologically to navigable waters, the requirements of 40 CFR part 280 and State programs approved under 40 CFR part 281 are intended to address the prevention of releases from underground storage tanks that might have an impact on groundwater and to require rapid response and corrective action at such sites if they compromise groundwater quality.

Editorial changes and clarifications. The proposed phrase in the first sentence which read, "* * * could not reasonably be expected to discharge oil as described in § 112.1(b)(1) of this part," becomes "* * * could not reasonably be expected to have a discharge as described in § 112.1(b)." The proposed phrase in the last sentence of the paragraph which read, "* * * which may serve to restrain, hinder, contain, or otherwise prevent a discharge of oil from reaching navigable waters of the United States or adjoining shorelines. * * *" becomes "* * * which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in § 112.1(b)."

Section 112.1(d)(1)(ii)—Exemptions Based on Function—DOT

Background. In 1991, we republished, without substantive change, the current exemption for equipment or operations of vessels or transportation-related onshore and offshore facilities that are subject to the authority and control of the U.S. Department of Transportation (DOT). While we received no comments on the proposal, we believe that this provision merits a few words to clarify the understanding of the regulated community. The Executive Order (EO) implementing the Act assigns regulatory jurisdiction to three Federal agencies based on the function of facilities. Section 2(b)(1) of EO 12777 (56 FR 54757, October 22, 1991) delegates to the Administrator of EPA authority in section 311(j)(1)(C) relating to the establishment of procedures, methods, and equipment, and other requirements for equipment to prevent and to contain discharges of oil and hazardous substances from non-transportation-related onshore facilities. Section 2(b)(2) of the EO delegates similar authority to contain discharges of oil and hazardous substances from vessels and transportation-related onshore facilities and deepwater ports to the Secretary of Transportation. Section 2(b)(3) of the EO delegates similar authority for offshore facilities, including associated pipelines, other than deepwater ports, to the Secretary of the Interior. A Memorandum of Understanding (MOU) among EPA, DOT, and the U.S. Department of the Interior (DOI), found at Appendix B to part 112, redelegated from DOI to EPA the responsibility for non-transportation-related offshore facilities located landward of the coastline. Similarly the MOU redelegated from DOI to DOT the responsibility for transportation-related offshore facilities, including pipelines, landward of the coastline.

In 1993, we proposed a definition for the term "complex," which is 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 Clean Water Act. We published that definition on July 1, 1994. 59 FR 34097. A commenter on the definition of "breakout tank" (*see also* discussion below on "breakout tank") asked for guidance as to which agency, DOT or EPA, regulates such tanks. Because of confusion in the regulated community over which Federal agencies have jurisdiction in complexes, we discuss the issue below.

Complexes. "Complex" is defined at § 112.2 as 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 Clean Water Act." The jurisdiction over a component of a complex is determined by the activity occurring at that component. An activity might at one time subject a facility to one agency's jurisdiction, and a different activity at the same facility using the same structure or equipment might subject the facility to the jurisdiction of another agency.

Equipment, operations, and facilities are subject to DOT jurisdiction when they are engaged in activities subject to DOT jurisdiction. If those facilities are also engaged in activities subject to EPA jurisdiction, such activities would subject the equipment, operation, or facility to EPA jurisdiction. An example of an activity subject to EPA jurisdiction would be the loading or unloading of oil into a tank truck or railcar. Under an MOU between EPA and DOT (See Appendix A of part 112), transportation-related activities regulated by DOT and non-transportation-related activities regulated by EPA are defined. The MOU provides that 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, are considered transportation-related activities, subject to DOT jurisdiction.

Another example of activities that might be considered a complex and therefore subject to both sets of rules is that of a breakout tank which is used for both transportation and non-transportation purposes. It is the activity to which the tank is put that determines jurisdiction. If you are an owner or operator of a complex, while you may not choose which agency will regulate your facility, you may choose not to engage in activities which would subject your facility to the jurisdiction of a particular agency if you do not wish to comply with that agency's rules. Otherwise, if you engage in activities subjecting your facility to the jurisdiction of two agencies, your facility would be subject to the more stringent of rules if there were to be a conflict or an inconsistency in those rules. For example, a facility with breakout tanks used solely to relieve surges in a pipeline, and not having another non-transportation-related activity or component, would not be required to have an SPCC Plan.

Which activity would be subject to DOT jurisdiction and which activity which would be subject to EPA jurisdiction is defined by the MOU in Appendix A to part 112. The definitions in the MOU are keyed to the delegations of authority in EO 12777.

Because regulatory jurisdiction is predicated upon the owner's or operator's activities at the facility, an owner or operator might have questions concerning that jurisdiction at his facility. To clarify regulatory jurisdiction, in February 2000, EPA and DOT signed a policy memorandum that described how the two agencies would work together to bring their respective regulations into alignment and, ultimately, to eliminate overlapping jurisdiction over tanks when possible.

Recently, DOT informed EPA of a voluntary initiative to collect information from industry on breakout tanks, beginning in December 2001. In anticipation of receiving the new tank information, DOT is considering updating the National Pipeline Mapping System (NPMS) data standards to reflect the guidelines for tank data submissions. Operators' data submissions will include the location of each tank farm with breakout tanks, information about each tank, and information about the accuracy of the data. The data will be depicted as a geospatial location in a digital file or a point located on a USGS 1:24,000 topographic quad map.

In addition to upgrading the NPMS, DOT is training its inspectors in tank inspection. In the President's Fiscal Year 2002 budget request, DOT expressed its intent to make tanks a priority in its compliance program, particularly where the tanks are in sensitive areas. DOT and EPA have agreed to provide cross-training of their respective personnel. As the two agencies proceed with tank oversight plans, the goal is to ensure that every tank is regulated and no tank is subject to overlapping regulations from two agencies.

Editorial changes and clarifications. "EPA Administrator" becomes "Administrator of EPA." Another revision corrects an incorrect citation to the 1971 MOU between EPA and DOT.

Section 112.1(d)(1)(iii)—Exemptions Based on Function—DOT and DOI

Background. We have added a new paragraph to the applicability section of the rule to note the jurisdictional changes resulting from an MOU between DOT, DOI, and EPA redelegating certain functions. The MOU was published on July 1, 1994 (at 59 FR 34102). The addition of this paragraph is not a substantive change in the rules, but merely an editorial revision to mark the jurisdiction of the respective agencies in this rule. It complements the other paragraphs in § 112.1(d)(1) that describe facilities which are not subject to EPA jurisdiction. Due to the MOU, the referenced facilities, equipment, and operations of DOT and DOI in § 112.1(d)(1)(iii), like the facilities, equipment, and operations described in § 112.1(d)(1)(i) and (ii), are not subject to EPA jurisdiction under section 311(j)(1)(C) of the Act. They are not subject to EPA jurisdiction either because of their location, in the case of DOI facilities, or because of their activities, which are strictly transportation-related, in the case of DOT facilities.

EO 12777 (56 FR 54757, October 22, 1991) 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 EO 12777 assigned to DOI spill prevention and control, contingency planning, and equipment inspection activities associated with offshore facilities. Section 311(a)(11) of the CWA 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 was expanded by EO 12777 to include inland lakes, rivers, streams, and any other inland waters.

Under section 2(i) of EO 12777, DOI redelegated, and EPA and DOT accepted, the functions vested in DOI by sections 2(b)(3), 2(d)(3), and 2(e)(3) of the EO. DOI redelegated to EPA the responsibility for non-transportation-related offshore facilities located landward of the coastline. To DOT, DOI redelegated responsibility for transportation-related facilities, including pipelines, located landward of the coastline. DOT retained jurisdiction for deepwater ports and the associated seaward pipelines. DOI retained jurisdiction over facilities, including pipelines, located seaward of

the coastline, except for deepwater ports and associated seaward pipelines. For purposes of the MOU, the term ''coastline'' means ''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.''

Section 112.1(d)(2)—Other Exemptions

Section 112.1(d)(2)(i)—Completely Buried Storage Tanks Currently Subject to all of the Technical Requirements of 40 CFR PART 280 or State Programs Approved under 40 CFR PART 281

Background. Part 280 and approved State programs. In 1991, we proposed to exempt from the underground storage capacity of facilities in the SPCC rule the storage capacity of buried underground storage tanks (USTs) currently subject to all of the technical requirements of 40 CFR part 280. We proposed this change as § 112.1(d)(2)(i) in 1991. We did not at the time include approved State programs in the proposal because in 1991 few if any States had such programs. In 40 CFR part 281 (published on September 23, 1988 at 53 FR 37212), EPA established regulations whereby a State could receive EPA approval for its State program to operate in lieu of the Federal program. In order to obtain EPA program approval under part 281, a State program must demonstrate that its requirements are no less stringent than the corresponding Federal regulations set forth in part 280, and that it provides adequate enforcement of these requirements. Thus, we have decided to exempt also the storage capacity of USTs subject to all of the technical requirements of State UST programs which EPA has approved. By January 2000, EPA had approved 27 State programs, plus programs in the District of Columbia and Puerto Rico. The rationale for exempting the storage capacity of these facilities from the SPCC regime is because 40 CFR part 280 and the approved State programs under 40 CFR part 281 provide comparable environmental protection for the purpose of preventing discharges as described in § 112.1(b).

Facilities with storage capacity not subject to part 280 or deferred from its provisions.

Storage capacity not subject to part 280. Some UST facilities have storage capacity that is not subject to part 280, for example: any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous wastes and other regulated substances; wastewater treatment tank systems that are part of a wastewater treatment facility regulated under section 307(b) or 402 of the Clean Water Act; equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks; and, UST systems whose capacity is 110 gallons or less. Also, part 280 does not provide for regulation of USTs storing animal fats and vegetable oils. All of these facilities remain potentially subject to the SPCC program.

Tanks deferred from compliance with part 280 rules. Other facilities with storage capacity subject to part 280 are deferred from current compliance with most of the technical requirements of that part, including: wastewater treatment tank systems; any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*); any UST system that is part of an emergency generator system at a nuclear power generation facility regulated by the Nuclear Regulatory Commission under 10 CFR part 50, Appendix A; airport hydrant fuel distribution systems; UST systems with field-constructed tanks; and, any UST system that stores fuel solely for use by an emergency power generator. All of these facilities remain potentially subject to the SPCC program.

Tanks excluded from part 280 UST definition. Excluded from the definition of ''underground storage tank'' or ''UST'' in part 280 are a: (1) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes; (2) tank used for storing heating oil for consumptive use on the premises where stored; (3) septic tank; (4) pipeline facility (including gathering lines) regulated under: (a) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, *et seq.*), (b) the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, *et seq.*), or (c) which is an intrastate pipeline facility regulated under State law comparable to the provisions of the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979; (5) surface impoundment, pit, pond, or lagoon; (6) storm-water or wastewater collection system; (7) flow-through process tank; (8) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or, (9) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor. An UST system includes the tank itself, connected underground piping, underground ancillary equipment, and containment system. Therefore, any of these tank systems may be potentially subject to the SPCC program.

Definitions. EPA proposed to define an UST as any tank which is completely covered with earth. Part 280 includes a broader definition of underground storage tanks, and includes partially buried and bunkered tanks. Partially buried tanks and bunkered tanks are excluded from the definition of ''completely buried tank'' in part 112, and are considered aboveground storage tanks (ASTs) for purposes of the rule, as are tanks in vaults. These tanks are not included in today's exemption because compared to completely buried tanks, partially buried and bunkered tanks are more likely to cause a discharge as described in § 112.1(b).

Although most USTs will be exempt from the SPCC rule (see the above discussion on § 112.1(d)(4)), a facility might have non-exempt USTs for which it must prepare a facility SPCC Plan. If part of your facility is subject to the rule, you must mark the location and contents of all containers, including exempt and non-exempt USTs, on the facility diagram. 40 CFR 112.1(d)(4). The rationale for this requirement is to help response personnel to easily identify dangers from either fire or explosion, or physical impediments during spill response activities. In addition, facility diagrams may be referred to in the event of design modifications. 56 FR 54626.

Capacity calculations. To calculate the 42,000-gallon threshold which subjects a facility operating a completely buried tank to the SPCC rule, you may exclude the storage capacity of any completely buried tank currently subject to all of the technical requirements of 40 CFR part 280 or of an approved State program under 40 CFR part 281. Thus we expect you will count few completely buried tanks containing petroleum products in that calculation. You must count the capacity of completely buried tanks containing products which are not regulated under part 280 or an approved State program under part 281, or which are not currently subject to all of its technical requirements.

Permanently closed tanks. In 1991, EPA proposed that the underground storage capacity of a facility does not include the capacity of underground tanks that are ''permanently closed'' as defined in § 112.2. Under today's rule, you may exclude the capacity of tanks that are permanently closed, as defined in § 112.2, in completely buried tank capacity calculations.

Comments. Completely buried storage tanks. Favorable comments. Commenters overwhelmingly favored eliminating dual regulation of ASTs and USTs. Most agreed that the UST program provides protection comparable to the SPCC program. Several argued that all USTs as defined in part 280, which includes partially buried and bunkered tanks, should be exempted. Others argued that tanks deferred under the UST program should be exempted from the SPCC program. Another commenter suggested that piping connecting exempted USTs to regulated ASTs should be exempted from the SPCC rules. The commenter added that if such piping is subject to leak detection requirements for USTs under 40 CFR part 280, then it should remain exclusively under UST rules and be exempted from SPCC rules.

Opposing comments. Several commenters, however, opposed the proposed exemption of USTs from the SPCC program. Those commenters argued that the SPCC rules are not duplicative. They asserted that UST rules lack provisions concerning contingency planning; emergency response; periodic training of personnel to deal with emergencies; maintenance of records regarding inspections and tests; maintenance of records regarding discharges to navigable waters or adjoining shorelines; diking of fuel transfer areas; fuel transfer area operational procedures; illumination of fuel transfer areas; stormwater drainage system design; posting of vehicle weight restrictions in areas where there is underground piping and/or design of underground piping to withstand vehicular loadings; a requirement for an application of ''good engineering practice,'' in other words, no requirements that the design and construction of a UST system be overseen by a Professional Engineer; a requirement that management sign the Plan; and, ''other topics enumerated in 40 CFR 112.7.'' One commenter noted that since groundwater becomes surface water eventually, whether within minutes or months, the absence of emergency provisions in the UST program might cause environmental problems. Another commenter argued that the new regulatory scheme would be confusing because a facility might have some containers subject to SPCC and some that are not, as well as containers that may be subject to State regulation.

Response to comments. Completely buried storage tanks. As we noted above, in the discussion of § 112.1(d)(1)(i), the UST program provides comparable environmental protection to the SPCC program. While not all aspects of the programs are identical, the UST program ensures protection against discharges as described in § 112.1(b), and protection of the environment. Therefore, dual regulation is unnecessary. In response to commenters asserting that UST rules lack provisions concerning contingency planning; emergency response; certain recordkeeping requirements; and other alleged deficiencies, we disagree. The UST rules have numerous safeguards addressing the commenter's issues.

Partially buried tanks and bunkered tanks. We disagree that partially buried tanks and bunkered tanks should be considered completely buried tanks, and therefore excluded from SPCC provisions. Such tanks may suffer damage caused by differential corrosion of buried and non-buried surfaces greater than completely buried tanks, which could cause a discharge as described in § 112.1(b). Such tanks are also not subject to secondary containment requirements under part 280 or a State program approved under 40 CFR part 281. There may also be accidents during loading or unloading operations, or overfills resulting in a discharge to navigable waters and adjoining shorelines. Furthermore, a failure of such a tank (caused by accident or vandalism) would be more likely to cause a discharge as described in § 112.1(b).

Contingency planning. While it is true that UST rules do not require contingency planning, spills and overfills of USTs resulting in a discharge to the environment are much less likely as a result of those rules. An owner or operator of an underground storage tank subject to 40 CFR part 280 or a State program approved under 40 CFR part 281 was required to install spill and overfill prevention equipment no later than December 22, 1998. 40 CFR 280.20 and 280.21. The use of this equipment will greatly reduce the likelihood of both small and large releases or discharges of petroleum to the environment through surface spills or overfilling underground storage tanks. In addition, the UST rules place a general responsibility on the owner or operator to ensure that discharges due to spilling and overfilling do not occur. See 40 CFR 280.30.

Emergency response and release reporting. The UST rules also have several requirements related to emergency response and release or discharge reporting. The UST rules generally require that releases of regulated substances be reported to the implementing agency within 24 hours. As part of the initial response requirements (found at 40 CFR 280.61), an owner or operator must take immediate action to prevent further release of the regulated substance and must identify and mitigate fire, explosion, and vapor hazards.

Reporting and recordkeeping. In addition to the reporting requirements mentioned above, there are numerous reporting and recordkeeping requirements in the rules governing underground storage tanks. Among these are: corrective action plans; documentation of corrosion protection equipment; documentation of UST system repairs; and, information concerning recent compliance with release detection requirements. Thus, the UST rules have significant reporting and recordkeeping requirements, including specific requirements related to spills and overfills.

Transportation rules. In addition to the EPA UST rules, the U.S. Department of Transportation has hazardous material regulations related to driver training, emergency preparation, and incident reporting and emergency response. Training regulations, for example, can be found at 49 CFR part 172, and loading and unloading regulations can be found at 49 CFR 177.834 and 49 CFR 177.837. These regulations apply, for example, to truck drivers delivering gasoline or diesel fuel to gas stations with underground storage tanks.

Section 112.1(f). Finally, as a safeguard, today's rule (*see* § 112.1(f) in today's preamble) provides the Regional Administrator with the authority to require any facility subject to EPA jurisdiction under section 311 of the CWA, regardless of threshold or other regulatory exemption, to prepare and implement an SPCC Plan when necessary to further the purposes of the Act.

Regulatory jurisdiction. To eliminate any possible confusion over regulatory jurisdiction, we explain in this preamble (see the above background discussion) which containers in a facility are subject to 40 CFR part 280 or a State program approved under 40 CFR part 281 and which are subject to part 112.

Piping, ancillary equipment, and containment systems. EPA has modified the scope of the proposed exemption for completely buried tanks (which are excluded from the scope of the SPCC rule if they are subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281) by clarifying that the exemption includes the connected underground piping, underground ancillary equipment, and containment

systems, in addition to the tank itself. This modification is consistent with the definition of underground storage tank system found at 40 CFR 280.12. In addition, this clarification is responsive to the comment which asked that the piping be included in the exemption.

Deferred tanks. We disagree that we should not regulate tanks which are deferred from compliance with any of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281. These are containers from which a discharge as described in § 112.1(b) may occur, and thus are properly subject to the SPCC rule. Furthermore, if they were not regulated by SPCC rules, they may, in some instances, not be regulated at all.

Effect on Facility Response Plan facilities. The exemption for completely buried tanks subject to all the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281 applies to the calculation of storage capacity both for SPCC purposes and for Facility Response Plan (FRP) purposes because the exemption applies to all of part 112. Therefore, a few FRP facilities with large capacity completely buried tanks subject to 40 CFR part 280 or a State program approved under 40 CFR part 281 might no longer be required to have FRPs. Calculations for planning levels for worst case discharges will also be affected. However, the Regional Administrator retains authority to require the owner or operator of any non-transportation-related onshore facility to prepare and submit a FRP after considering the factors listed in § 112.20(f)(2). *See* § 112.20(b)(1).

Editorial changes and clarifications. ''Underground storage tanks'' becomes ''completely buried storage tanks.'' The phrase ''does not include'' becomes ''excludes.'' We have amended the rule to clarify that facilities must be subject to ''all of'' the technical requirements of 40 CFR part 280 or of a State program approved under 40 CFR part 281 to qualify for the SPCC exemption. If a facility is subject to some, but not all of the UST requirements, it may be subject to the SPCC rule. Facilities in this category include those which are excluded from UST requirements, or deferred from compliance with some or all of those requirements.

Section 112.1(d)(2)(ii)—AST Threshold, Minimum Container Size, Permanently Closed Tanks

Background. Regulatory thresholds. In the 1997 preamble, we asked for comment as to whether any change in the level of storage capacity which subjects a facility to this rule is justified. 62 FR 63813. We noted that we were considering eliminating the provision in the current rule that requires a facility having an aboveground container in excess of 660 gallons to prepare an SPCC Plan, as long as the total aboveground capacity of the facility remained at 1,320 gallons or less. The effect of such a change would be to raise the threshold for regulation to an aboveground storage capacity greater than 1,320 gallons.

In 1991, EPA also proposed that the aboveground storage capacity of a facility does not include the capacity of aboveground storage containers that are ''permanently closed'' as defined in § 112.2.

Comments. Minimum size container. Numerous commenters suggested a *de minimis* size for containers to be used for AST capacity calculations. Most of the suggestions came in the context of the discussion of the proposed definition of ''bulk storage tank.'' Suggestions for a minimum size ranged from over 55 gallons to 25,000 gallons. The bulk of the commenters favored either a greater than 55-gallon number, or a greater than 660-gallon figure.

Regulatory thresholds. Higher threshold. Commenters offered numerous threshold levels in both 1991 and 1997. Suggestions for the regulatory threshold in 1991 ranged from greater than 1,320 gallons to 120,000 gallons. Many commenters, particularly utilities, favored thresholds in the 10,000–42,000-gallon range. In 1997, when EPA suggested it might consider a greater than 1,320-gallon threshold, many commenters favored that suggestion. Others urged thresholds ranging up to 15,000 gallons.

Lower threshold. A few commenters suggested lowering the threshold. Commenters suggested threshold levels of 110 and 250 gallons. The general rationale for these suggestions was that oil spills causing even a sheen can be devastating. Therefore, these commenters reasoned that sheens from home heating oil tanks of 110 gallons, i.e., two 55-gallon drums, are every bit as important as sheens from crude oil tanks. An advocate for a lower threshold noted that manufacturers now sell, market, and produce fuel containers of 650 gallons designed to avoid compliance with the rule, whether the site is adjacent to navigable waterways or not. The commenter added that most manufacturers market or sell a ''listed'' tank of 250 gallons, and that under current rules, five of these tanks would not subject a facility to the SPCC rule, yet the risk would be nearly identical to one larger tank of 1,250 gallons depending upon the design of the tank.

Response to comments. Minimum container size. In response to comments, we are introducing a minimum container size. The 55 gallon container is the most widely used commercial bulk container, and these containers are easily counted. Containers below 55 gallons in capacity are typically end-use consumer containers. Fifty-five gallon containers are also the lowest size bulk container that can be handled by a human. Containers above that size typically require equipment for movement and handling. We considered a minimum container size of one barrel. However, a barrel or 42 gallons is a common volumetric measurement size for oil, but is not a common container size. Therefore, it would not be appropriate to institute a 42 gallon minimum container size.

You need only count containers of 55 gallons or greater in the calculation of the regulatory threshold. You need not count containers, like pints, quarts, and small pails, which have a storage capacity of less than 55 gallons. Some SPCC facilities might therefore drop out of the regulated universe of facilities. You should note, however, that EPA retains authority to require any facility subject to its jurisdiction under section 311(j) of the CWA to prepare and implement an SPCC Plan, or applicable part, to carry out the purposes of the Act.

While some commenters had suggested a higher threshold level, we believe that inclusion of containers of 55 gallons or greater within the calculation for the regulatory threshold is necessary to ensure environmental protection. If we finalized a higher minimum size, the result in some cases would be large amounts of aggregate capacity that would not be counted for SPCC purposes, and would therefore be unregulated, posing a threat to the environment. We believe that it is not necessary to apply SPCC or FRP rules requiring measures like secondary containment, inspections, or integrity testing, to containers smaller than 55 gallons storing oil because a discharge from these containers generally poses a smaller risk to the environment. Furthermore, compliance with the rules for these containers could be extremely burdensome for an owner or operator and could upset manufacturing operations, while providing little or no significant increase in protection of human health or the environment. Many of these smaller containers are constantly being emptied, replaced, and relocated so that serious corrosion will likely soon be detected and undetected leaks become highly unlikely. While we realize that small discharges may harm

the environment, depending on where and when the discharge occurs, we believe that this measure will allow facilities to concentrate on the prevention and containment of discharges of oil from those sources most likely to present a more significant risk to human health and the environment.

Effect on Facility Response Plan facilities. The exemption for containers of less than 55 gallons applies to the calculations of storage capacity both for SPCC purposes and for FRP purposes because the exemption applies to all of part 112. Therefore, a few FRP facilities might no longer be required to have FRPs. The calculations for planning levels for worst case discharges would also be affected.

Regulatory thresholds. We have decided to raise the current regulatory threshold, as discussed in the 1997 preamble, to an aggregate threshold of over 1,320 gallons. We believe that raising the regulatory threshold is justified because our Survey of Oil Storage Facilities (published in July 1996, and available on our Web site at *www.epa.gov/oilspill*) points to the conclusion that several facility characteristics can affect the chances of a discharge. First, the Survey showed that as the total storage capacity increases, so does the propensity to discharge, the severity of the discharge, and the costs of cleanup. Likewise, the Survey also pointed out that as the number of tanks increases, so does the propensity to discharge, the severity of the discharge, and the costs of cleanup. Finally, the Survey showed that as annual throughput increases, so does the propensity to discharge, the severity of the discharge, and, to a lesser extent, the costs of the cleanup.

The threshold change will have several benefits. The threshold increase will result in a substantial reduction in information collection associated with the rule overall. Some smaller facilities will no longer have to bear the costs of an SPCC Plan. EPA will be better able to focus its regulatory oversight on facilities that pose a greater likelihood of a discharge as described in § 112.1(b), and a greater potential for injury to the environment if a discharge as described in § 112.1(b) results.

We raise the regulatory threshold realizing that discharges as described in § 112.1(b) from small facilities may be harmful, depending on the surrounding environment. Among the factors remaining to mitigate any potential disasters are that small facilities no longer required to have SPCC Plans are still liable for cleanup costs and damages from discharges as described in § 112.1(b). We encourage those facilities exempted from today's rule to maintain SPCC Plans. Likewise, we encourage facilities becoming operable in the future with storage or use capacity below the regulatory threshold to develop Plans. We believe that SPCC Plans have utility and benefit for both the facility and the environment. But, we will no longer by regulation require Plans from exempted facilities.

While we believe that the Federal oil program is best focused on larger risks, State, local, or tribal governments may still decide that smaller facilities warrant regulation under their own authorities. In accord with this philosophy, we note that this Federal exemption may not relieve all exempted facilities from Plan requirements because some States, local, or tribal governments may still require such facilities to have Plans. While we are aware that some States, local, or tribal governments have laws or policies allowing them to set requirements no more stringent than Federal requirements, we encourage States, local, or tribal governments to maintain or lower regulatory thresholds to include facilities no longer covered by Federal rules where their own laws or policies allow. We believe that CWA section 311(o) authorizes States to establish their own oil spill prevention programs which can be more stringent than EPA's program.

Regulatory safeguard. When a particular facility that is below today's threshold becomes a hazard to the environment because of its practices, or when needed for other reasons to carry out the Clean Water Act, the Regional Administrator may, under a new rule provision, require that facility to prepare and implement an SPCC Plan. See § 112.1(f). This provision acts as a safeguard to an environmental threat from any exempted facility.

Editorial changes and clarifications. The reference to "underground storage tanks" was deleted because it is unnecessary. A reference to the exemption of certain "completely buried" storage tanks from the rules is contained in § 112.1(d)(4).

Section 112.1(d)(3)—Minerals Management Service Facilities

Background. In 1991, EPA proposed to exempt from the SPCC rule facilities subject to Minerals Management Service (MMS) Operating Orders, notices, and regulations. The rationale for the 1991 proposal was to avoid redundancy in regulation, based on EPA's analysis that MMS Operating Orders require adequate spill prevention, control, and countermeasures that are directed more specifically to the facilities subject to MMS requirements. Until October 22, 1991, the date of the 1991 proposed rule, responsibility for the establishment of procedures, methods, and equipment and other requirements for equipment to prevent and to contain discharges of oil from offshore facilities, including associated pipelines, other than deepwater ports subject to the Deepwater Ports Act, was delegated to EPA. Under EO 12777 (56 FR 54747, October 22, 1991), responsibility for the establishment of procedures, methods, and equipment and other requirements for equipment to prevent and to contain discharges of oil from offshore facilities, including associated pipelines, other than deepwater ports subject to the Deepwater Ports Act, was redelegated to the U.S. Department of the Interior (DOI). These facilities are generally offshore oil production or exploration facilities.

In 1994, in another Memorandum of Understanding (MOU) found in Appendix B of part 112, EPA, DOI, and DOT redelegated the responsibility to regulate non-transportation-related offshore facilities located in and along the Great Lakes, rivers, coastal wetlands, and the Gulf Coast barrier islands from DOI to EPA.

Because of the redelegation of responsibility, some DOI facilities again became subject to the jurisdiction of EPA under section 311(j)(1)(C) of the Act. We added a reference to the MOU in the rule.

Comments. Most commenters favored the proposed exemption because they believed that MMS orders, notices, and regulations require oil spill prevention and contingency planning equivalent to the environmental protection envisioned by EPA's rules. Two commenters, both States, opposed the proposal. One was concerned with MMS' "historic treatment of identified violations." The other suggested that the more stringent of EPA or MMS regulations apply.

Response to comments. We have retained our original proposal, except for the editorial revision, because we believe that MMS will provide equivalent environmental protection for the facilities under its jurisdiction. MMS regulations require adequate spill prevention, control, and countermeasures that are directed more specifically to the facilities subject to MMS requirements.

Editorial changes and clarifications. The term "Operating Orders" becomes "regulations."

Section 112.1(d)(4)—Completely Buried Storage Tanks

Background. This paragraph is a companion paragraph to § 112.1(d)(2)(i) for purposes of SPCC exemption. As in § 112.1(d)(2)(i), we have also exempted connected underground piping, underground ancillary equipment, and containment systems subject to all of the technical requirements of part 280 or a State program approved under 40 CFR part 281. We also added a clause noting that these exempted tanks must be marked on the facility diagram as provided in § 112.7(a)(3), if the facility is otherwise subject to this part. See the discussion above concerning § 112.1(d)(2)(i).

Editorial changes and clarifications. ''Underground storage tanks'' becomes ''completely buried storage tanks.'' We also reference 40 CFR part 281.

Section 112.1(d)(5)—Minimum Size Exemption

Background. This is a new section we added in response to comments pertaining to the regulatory threshold/minimum container size issue discussed above. This section clarifies that any aboveground or completely buried container with capacity of less than 55 gallons is not subject to the rule. It is a companion rule to § 112.1(d)(2)(ii) for purposes of SPCC exemption. See the discussion above concerning § 112.1(d)(2)(ii).

Section 112.1(d)(6)—Wastewater Treatment Facility Exemption

Background. In 1991, EPA proposed various changes to § 112.1(d) concerning exemptions to part 112, and received comments on its proposals. Among those comments was one suggesting an exemption for certain treatment systems.

Comments. One commenter suggested that the ''§ 112.1 exceptions should be expanded to include facility storage and treatment tanks associated with 'non-contact cooling water systems' and/or 'storm water retention and treatment systems.' Although these tanks are designed to remove spilled oil from manufacturing operations and parking lot runoff, the concentration of oil in the water at any given time would be insignificant. These tanks are typically very large, *i.e.*, in excess of 100,000 gallons, and are typically not contained by diked walls or impervious surfaces. GM believes the cost to contain these structures could be better spent on other SPCC regulatory requirements.''

Response to comments. We agree with the commenter that certain wastewater treatment facilities or parts thereof should be exempted from the rule, if used exclusively for wastewater treatment and not used to meet any other requirement of part 112. We have therefore amended the rule to reflect that agreement. No longer subject to the rule would be wastewater treatment facilities or parts thereof such as treatment systems at POTWs and industrial facilities treating oily wastewater.

Many of these wastewater treatment facilities or parts thereof are subject to NPDES or state-equivalent permitting requirements that involve operating and maintaining the facility to prevent discharges. 40 CFR 122.41(e). The NPDES or state-equivalent process ensures review and approval of the facility's: plans and specifications; operation/maintenance manuals and procedures; and, Stormwater Pollution Prevention Plans, which may include Best Management Practice Plans (BMP).

Many affected facilities are subject to a BMP prepared under an NPDES permit. Some of those plans provide protections equivalent to SPCC Plans. BMPs are additional conditions which may supplement effluent limitations in NPDES permits. Under section 402(a)(1) of the CWA, BMPs may be imposed when the Administrator determines that such conditions are necessary to carry out the provisions of the Act. *See* 40 CFR 122.44(k). CWA section 304(e) authorizes EPA to promulgate BMPs as effluent limitations guidelines. NPDES rules provide for BMPs when: authorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances; numeric limitations are infeasible; or, the practices are reasonably necessary to achieve effluent limitations and standards to carry out the purposes of the CWA. In addition, each NPDES or state equivalent permit for a wastewater treatment system must contain operation and maintenance requirements to reduce the risk of discharges. 40 CFR 122.41(e).

Additionally, some wastewater is pretreated prior to discharge to a permitted wastewater treatment facility. The CWA authorizes EPA to establish pretreatment standards for pollutants that pass through or interfere with the operation of POTWs. The General Pretreatment Regulations (GPR), which set for the framework for the implementation of categorical pretreatment standards, are found at 40 CFR part 403. The GPR prohibit a user from introducing a pollutant into a POTW which causes pass through or interference. 40 CFR 403.5(a)(1). More specifically, the GPR also prohibit the introduction into of POTW of ''petroleum, oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through. 40 CFR 403.5(b)(6). EPA believes that the GPR and the more specific categorical pretreatment standards, some of which allow indirect dischargers to adopt a BMP as an alternative way to meet pretreatment standards, will work to prevent the discharge of oil from wastewater treatment systems into navigable waters or adjoining shorelines by way of a POTW.

However, if a wastewater facility or part thereof is used for the purpose of storing oil, then there is no exemption, and its capacity must be counted as part of the storage capacity of the facility. Any oil storage capacity associated with or incidental to these wastewater treatment facilities or parts thereof continues to be subject to part 112. At permitted wastewater treatment facilities, storage capacity includes bulk storage containers, hydraulic equipment associated with the treatment process, containers used to store oil which feed an emergency generator associated with wastewater treatment, and slop tanks or other containers used to store oil resulting from treatment. Some flow through treatment such as oil/water separators have a storage capacity within the treatment unit itself. This storage capacity is subject to the rule. An example of a wastewater treatment unit that functions as storage is a treatment unit that accumulates oil and performs no further treatment, such as a bulk storage container used to separate oil and water mixtures, in which oil is stored in the container after removal of the water in the separation/treatment process.

We do not consider wastewater treatment facilities or parts thereof at an oil production, oil recovery, or oil recycling facility to be wastewater treatment for purposes of this paragraph. These facilities generally lack NPDES or state-equivalent permits and thus lack the protections that such permits provide. Production facilities are normally unmanned and therefore lack constant human oversight and inspection. Produced water generated by the production process normally contains saline water as a contaminant in the oil, which might aggravate environmental conditions in addition to the toxicity of the oil in the case of a discharge.

Additionally, the goal of an oil production, oil recovery, or oil recycling facility is to maximize the production or recovery of oil, while eliminating impurities in the oil, including water, whereas the goal of a wastewater

treatment facility is to purify water. Neither an oil production facility, nor an oil recovery or oil recycling facility treats water, instead they treat oil. For purposes of this exemption, produced water is not considered wastewater and treatment of produced water is not considered wastewater treatment. Therefore, a facility which stores, treats, or otherwise uses produced water remains subject to the rule. At oil drilling, oil production, oil recycling, or oil recovery facilities, treatment units subject to the rule include open oil pits or ponds associated with oil production operations, oil/water separators (gun barrels), and heater/treater units. Open oil pits or ponds function as another form of bulk storage container and are not used for wastewater treatment. Open oil pits or ponds also pose numerous environmental risks to birds and other wildlife.

Examples of wastewater treatment facilities or parts thereof used to meet a part 112 requirement include an oil/water separator used to meet any SPCC requirement. Oil/water separators used to meet SPCC requirements include oil/water separators used as general facility secondary containment (*i.e.,* § 112.7(c), secondary containment requirements for loading and unloading (*i.e.,* § 112.7(h)), and for facility drainage (*i.e.,* § 112.8(b) or § 112.9(b)).

Whether a wastewater treatment facility or part thereof is used exclusively for wastewater treatment (i.e., not storage or other use of oil) or used to satisfy a requirement of part 112 will often be a facility specific determination based on the activity associated with the facility or part thereof. Only the portion of the facility (except at an oil production, oil recovery, or oil recycling facility) used exclusively for wastewater treatment and not used to meet any part 112 requirement is exempt from part 112. Storage or use of oil at such a facility will continue to be subject to part 112.

Although we exempt wastewater treatment facilities or parts thereof from the rule under certain circumstances, a mixture of wastewater and oil still is "oil" under the statutory and regulatory definition of the term (33 U.S.C. 1321(a)(1) and 40 CFR 110.2 and 112.2). Thus, while we are excluding from the scope of the rule certain wastewater treatment facilities or parts thereof, a discharge of wastewater containing oil to navigable waters or adjoining shorelines in a "harmful quantity" (40 CFR part 110) is prohibited. Thus, to avoid such discharges, we would expect owners or operators to comply with the applicable permitting requirements, including best management practices and operation and maintenance provisions.

Proposed § 112.1(e)—Facility Notification

Background. In 1991, EPA proposed to require that any facility subject to its jurisdiction under the Clean Water Act which also meets the regulatory storage capacity threshold notify the Agency on a one-time basis of its existence. CWA section 311(m) provides EPA with the authority to require the owner or operator of a facility subject to section 311 to make reports and provide information to carry out the objectives of section 311. Any owner or operator who failed to notify or knowingly submitted false information in a notification would be subject to a civil penalty. This type of notice is separate from the notice required at 40 CFR 110.3 of discharges which may be harmful to the public health or welfare or the environment. We did not propose any changes to the notice requirements in § 110.3.

We proposed that facility notification include, among other items, information concerning the number, size, storage capacity, and locations of ASTs. The proposal would have exempted information regarding the number and size of completely buried tanks, as defined in § 112.2, from the notification requirement. The rationale for notification was that submission of this information would be needed to help us identify our universe of facilities and to help us administer the Oil Pollution Prevention Program by creating a data base of facility-specific information. We also asked for comments regarding the form on which notification would be submitted, and on various possible items of information that could be included besides the ones proposed. Lastly, we asked for comments on alternate forms of facility notification. 56 FR 54614–15.

Comments. Favorable comments. A number of commenters favored the proposal, including some industry commenters. These commenters stated that there was generally no current procedure whereby EPA can identify the universe of sites subject to the SPCC rule, and that an inventory of these facilities is necessary.

Opposing comments. Most industry commenters opposed the proposal either in part or in its entirety.

Sources of information. Commenters who opposed the proposal in its entirety asserted that it was unnecessary, largely because they believed the information sought might be better obtained from other sources, such as State sources or SARA Title III reports. Some States wanted copies of the notifications EPA would receive, and at least one suggested requiring updates. One commenter suggested that we gather the information through representative sampling at on-site surveys. Another commenter suggested that we use spill reports already submitted because it makes more sense to regulate those facilities whose practices have led to a spill.

Applicability. Other commenters criticized the fact that the proposal would have been applicable to facilities which were not subject to the SPCC rule. Their solution was to limit applicability to facilities currently regulated under part 112.

Terrorism. One commenter suggested that the aggregation of such strategic information in an easily accessed data base like a facility notification data base could provide an intelligence windfall to terrorists and other enemies of our nation.

Small facilities. Commenters for small facilities argued that facility notification would cause a deluge of notifications to be sent to EPA with little or no environmental benefit. Some of these commenters suggested exempting small facilities at various levels of storage capacity, for example, 42,000 gallons or 100,000 gallons.

Notification time line. In particular, commenters questioned various aspects of the proposal. Many questioned the necessity of providing the information within the proposed two months time frame. Some commenters suggested other time periods ranging from "more than two months" to 18 months. However, the bulk of the commenters favored a six month period for facility notification if notification were to be required. Others favored a "phase-in" of the requirements.

Who must notify. Some commenters asked who must notify, the owner or operator. They noted that these might be different persons. One commenter suggested that the operator of the facility, the owner of any improvements at the facility, and the owner of the land at the facility should be required to submit facility notification. The commenter argued that the United States government is the landowner most prejudiced by the absence of a requirement of landowner involvement in the preparation of an SPCC plan because an owner or operator can prepare a minimal SPCC Plan and not even inform the landowner of it.

Location issues. Others questioned the proposed requirement for the name, address, and zip code of the facility, arguing that provision of such information was not always possible,

especially in remote rural areas. Some noted that drilling rigs move from location to location as often as every few months. Commenters suggested alternatives such as use of longitude and latitude, or the Universal Transverse Mercator system, or a mailing address.

Storage capacity. A number of commenters had concerns about the requirement for the total number and size of ASTs, and the total AST capacity of the facility. Commenters noted that there was no space on the form for containers less than 250 gallons. Other commenters asked if additions to storage capacity would trigger a new notification. Some commenters believed that storage capacity could be measured by SARA Title III information.

Distance to navigable waters. The proposed requirement to detail the distance to the nearest navigable water elicited many comments. Some commenters noted that there was no definition of navigable waters on the form, making it difficult for some responders to answer the question. Others asserted that making the determination on distance to navigable waters was a difficult one due to litigation concerning the definition of the term. Yet other commenters thought that we should specify a minimum distance to navigable waters, on the theory that only facilities within a certain distance would have a reasonable possibility of discharge to such waters.

Classification of facilities. One commenter noted that exploration and production facilities rarely have Dun & Bradstreet numbers, and that the information received from Dun & Bradstreet might be irrelevant for our purposes. Regarding the reporting of Standard Industrial Classification codes (SIC) (now replaced by North American Industry Classification System (NAICS) codes), commenters asserted that EPA used inaccurate codes, that no codes were listed for edible oil facilities, and that the codes listed were misleading in that they did not cover all possible industries regulated.

Use of oil. Permanently closed containers. Facilities using primarily oil-filled equipment, not bulk storage containers, asked whether they too were covered by the notification proposal. Other commenters asked for clarification as to whether permanently closed tanks were covered by the proposal.

Possible additional items. There were numerous comments on various additional items for which EPA had requested comment, but which were not included in the proposal. Possible additional items included: latitude and longitude of the facility; location of environmentally sensitive areas and potable water supplies; presence of secondary containment; spill history; leak detection equipment and alarms; age of the tanks; potential for adverse weather; and, for field verification purposes, a requirement to have storage facilities placarded or similarly identified. Most commenters opposed the inclusion of additional items. Several supported these additions as well as the addition of other information, particularly information concerning tank materials, methods of construction (for example, field-or shop-erected) and substance stored.

Response to comments. Withdrawal of proposal. We have decided to withdraw the proposed facility notification requirement because we are still considering issues associated with establishing a paper versus electronic notification system, including issues related to providing electronic signatures on the notification. Should the Agency in the future decide to move forward with a facility notification requirement, we will repropose such requirement.

Section 112.1(e)—Proposed as § 112.1(f)—Compliance With Other Laws

Background. While today's rule is substantially similar to the current one, EPA suggested in the 1991 preamble that facility owners consider industry standards in preparing SPCC Plans. 56 FR 54617.

Comments. State rules. Several States wrote to ask EPA to be as consistent with current State rules as possible. One industry commenter complained that EPA rules were more stringent than some State rules. Other industry commenters opposed either State or Federal regulation, or both.

Industry standards. Several commenters wrote to urge that EPA incorporate industry standards into the rule, on the theory that if EPA wants to require these standards, they must be incorporated into the rule. Others wrote to urge the inclusion of specific standards, such as fire codes or steel tank codes.

Response to comments. State rules. Section 311(o)(2) of the CWA specifically provides that nothing in section 311 "shall be construed as preempting any State or political subdivision thereof from imposing any requirements or liability with respect to the discharge of oil * * *." We are aware that Federal rules often set the standard for State rules, and at least set a floor for State rules. Under CWA section 311(o)(2), States are free to impose more stringent standards relating to prevention of oil discharges, or none at all. EPA encourages States to set up their own oil pollution prevention programs because we believe that oil pollution prevention efforts should be a joint Federal-State effort.

Industry standards. Under this rule, a facility is required to at least consider the use of all relevant measures, including the use of industry standards, as a way to implement those measures. The requirement comes in the language of revised § 112.3(d)(1)(iii) requiring the PE to attest 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." A facility should use industry standards whenever possible in preparing and implementing its SPCC Plan, and should discuss their use in Plans. While facility owners or operators should look to specific industry standards as a guide for preparing SPCC Plans, we do not believe that incorporating specific standards into this rule is appropriate. Such incorporation freezes standards into rules, which may swiftly become outdated or obsolete.

Editorial changes and clarifications. The new introductory language is, "This part establishes requirements for the preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans." The new language covers all SPCC requirements, both general and specific. That language replaces "This part provides for * * *." The phrase "Plans prepared in accordance with §§ 112.7, 112.8, 112.9, 112.10, and 112.11" was eliminated because new introductory language makes it unnecessary.

Section 112.1(f)—Proposed as § 112.1(g)—Plans for Exempted Facilities

Background. This is a new section, proposed in 1993, that allows the Regional Administrators (RAs) to require preparation of entire an SPCC Plan, or applicable part, by the owner or operator of an otherwise exempted facility, that is subject to the jurisdiction of EPA under section 311(j) of the CWA. The proposal stems from the 1988 Interagency SPCC Task Force and subsequent GAO report, "Inland Oil Spills" (GAO/RCED–89–65).

Comments. Authority. One commenter called the proposal "arbitrary and capricious" and feared political use of the authority. Some commenters questioned EPA authority for the proposal.

Standard to use authority. One commenter favored the proposal and suggested that we look at additional physical characteristics of the facility in order to make a determination to require the owner or operator to prepare an SPCC Plan. Other commenters asserted that the standards for requiring Plans need to be specified, or that "good cause" be the standard.

Response Plans. One commenter urged a "vastly abbreviated" version of this section in the event that the Regional Administrator requires a small Appalachian facility to prepare a facility response plan in addition to an SPCC Plan, because the "extensive requirements outlined in the appendices and attachments have little applicability" to a small Appalachian oil field storage facility. The commenter added that the availability of secondary containment at most Appalachian facilities mitigates many of the requirements of the complete response plan which is directed towards large oil storage tanks.

Appeals process. Other commenters called for an appeals process, and specification of time frames within which the RA must act.

Response to comments. Authority. EPA believes that it has adequate authority under section 311 of the CWA to require any facility within its jurisdiction to prepare a Plan that could because of its location, cause a discharge as described in § 112.1(b). This authority is broad enough to encompass the storage or use capacity of any exempted facility within EPA's jurisdiction, regardless of size.

Standard to use authority. RAs may invoke this section to carry out the purposes of the Act on a case-specific basis when it is needed to prevent a discharge as described in § 112.1(b), and thus protect the environment. While we expect to use this section sparingly, it is necessary to address gaps in other regulatory regimes that might best be remedied by requiring a facility to have an SPCC Plan. Factors the RAs may consider in making a determination that a facility needs an SPCC Plan include, but are not limited to, the physical characteristics of the facility, the presence of secondary containment, the discharge history of the facility, and the proximity of the facility to sensitive environmental areas such as wetlands, parks, or wildlife refuges. An example of the use of this section might be when a facility is exempted from SPCC rules because its storage capacity is below the regulatory threshold, but the facility has been the cause of repeated discharges as described in § 112.1(b). The RA might require an entire Plan, or might only require a partial Plan addressing secondary containment, for example, to prevent future discharges as described in § 112.1(b).

Partial Plans. We clarify that the RA may require partial Plans to cover situations where the preparation of only a partial Plan may be necessary, such as to supplement an existing document other than a Plan or to address a particular environmental threat. The decision to require a Plan (or partial Plan) could be based on the presence of environmental concerns not adequately addressed under UST or NPDES regulations, or due to other relevant environmental factors. The section may be invoked when the RA determines it is necessary to "carry out the purposes of the Act."

The decision to require a partial Plan is separate from a decision to require an amendment to a Plan. In one case, the assumption is that a Plan doesn't exist; in the other, that an existing Plan needs amendment.

Response Plans. Section 112.1(f) applies only to the total or partial preparation of an SPCC Plan. It does not authorize the Regional Administrator to require you to prepare a facility response plan. We have withdrawn a proposal (see 1993 proposed § 112.7(d)(1)) which would have required you to prepare a response plan when your SPCC facility lacked secondary containment. Therefore, most facilities will incur no response planning costs. Instead, if your facility lacks secondary containment, you must prepare a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d). As a result, requirements to prepare a facility response plan are contained solely in § 112.20, and not § 112.1(f).

Appeals process. We agree that an appeals process is appropriate for this section. Therefore we have added a new paragraph (f)(5) to include such a process, and have provided time frames for the process. The appeals process is modeled upon current § 112.4(f), which we reproposed in 1991 and have finalized today.

Editorial changes and clarifications. We deleted the proposed requirement to "submit" a Plan in paragraph (f)(2), because we only require submission of Plans in certain circumstances, such as when there has been a discharge(s) as described in § 112.1(b) over the threshold amount provided for in § 112.4(a), and the RA believes that submission of the Plan is necessary. We do not require Plan submission as a general rule.

Section 112.2—Definitions

Background. Definitions proposed in 1993 and 1999, and promulgated in the Facility Response Plan rule of 1994 and 2000 are reprinted in the rule for the convenience of the reader. No substantive changes were made to those definitions and they are not discussed further in this preamble, except where we made editorial changes in today's rule. The discussion for those editorial changes, and for proposed definitions that were not already finalized in the 1994 and 2000 FRP rule, follows.

Adverse Weather

Editorial changes and clarifications. We have made slight editorial changes to this definition, none of which are substantive. In the first sentence, the phrase "will be considered" becomes "must be considered." In the second sentence, the phrase "as appropriate" is placed in parentheses.

Alteration

Background. In 1993, we proposed a definition of "alteration" in conjunction with the proposed rule for ensuring against brittle fracture. We proposed the definition of "alteration" to mean "any work on a tank or related equipment involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of a tank."

Comments. One commenter suggested that we conform the proposed definition of "alteration" with the API 653 definition, specifically deleting the phase "or related equipment."

Response to comments. Related equipment. We agree with the commenter and will not include the term "or related equipment" in the definition to conform with API Standard 653, which does not include alterations of related equipment as a criterion for brittle fracture evaluation. In the preamble to the 1993 proposal, we gave examples of alteration that included the addition of manways and nozzles greater than 12-inch nominal pipe size and an increase or decrease in tank shell height. 58 FR 8843.

Industry Standards. An industry standard that may be helpful in understanding the definition of "alteration" is API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction."

Editorial changes and clarifications. "Tank" becomes "container."

Breakout tank

Background. We proposed this definition and the definition of "bulk storage tank" in 1991 to clarify the distinction between facilities regulated

by DOT and EPA. Breakout tanks are used mainly to compensate for pressure surges or to control and maintain pressure through pipelines. They are also sometimes used for bulk storage. These tanks are frequently in-line, and may be regulated by EPA, DOT, or both. When a breakout tank is used for both storage and for pipeline control, it becomes in itself a "complex," and is regulated as such. See the discussion on "complexes" in today's preamble at § 112.1(d)(1)(ii).

Comments. A number of commenters suggested that EPA adopt the DOT definition of breakout tank. Another commenter asked for guidance as to which agency, DOT or EPA, regulates such tanks.

Response to comments. On the suggestion of commenters, EPA has adopted a modified version of the DOT definition in 49 CFR 195.2. This revision promotes consistency in the DOT and EPA definitions to aid the regulators and regulated community. We modified the DOT definition by substituting the word "oil" for "hazardous liquid," because our rules apply only to oil. We also use in the definition the term "container" rather than just "tank" to cover any type of container. This terminology is consistent with other terminology used in this rule.

A breakout tank that is used only 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 is subject only to DOT jurisdiction. When that same breakout tank is used for other purposes, such as a process tank or as a bulk storage container, it is no longer solely within the definition of breakout tank, and may be subject to EPA or other jurisdiction with the new use.

EPA and DOT also signed a joint memorandum dated February 4, 2000, clarifying regulatory jurisdiction on breakout tanks. That memorandum is available to the public upon request. It is also available on our Web site at *http://www.epa.gov/oilspill* under the "What's New" section.

Bulk Storage Container—Formerly Bulk Storage Tank

Background. Along with "breakout tank," we proposed this definition in 1991 to help clarify the distinctions between facilities regulated by EPA and those regulated by DOT. The proposed definition was originally for "bulk storage tank." As explained below, we changed the definition to "bulk storage container."

Comments. Many electric utility commenters urged that EPA explicitly exclude electrical equipment from the definition because such equipment is not bulk storage. Other commenters asked for a minimum size to which the definition should apply.

Response to comments. We agree that electrical equipment is not bulk storage. See the above discussion on the applicability of the rule to electrical and other operating equipment under § 112.1(b). See also the definition of "bulk storage container" in § 112.2. For a discussion of minimum size containers to which the rule applies, see the discussion under § 112.1(d)(2)(ii).

Editorial changes and clarifications. "Tank" becomes "container" because "container" is more accurate. Many containers storing oil are not tanks, but provide bulk storage. A bulk storage container may be either aboveground, partially buried, bunkered, or completely buried.

The definition of "bulk storage container" adopted in today's rule should not be confused with the definitions of "container" used in several fire codes. Sometimes those codes limit a container to one below a certain size. See for example, the BOCA National Fire Prevention Code, section F–2302.1 (1999) and NFPA 30 section 1–6 (1996). The definition adopted in today's rule is broader than the definitions in the codes in that it is not limited to a particular amount of storage capacity.

We also clarify in today's rule that oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Bunkered Tank

Background. We proposed this definition in 1991 to clarify that bunkered tanks are a subset of partially buried tanks, and as such, subject to part 112 as aboveground tanks.

Comments. One commenter wrote that the definition is "undecipherable and should be rewritten." The commenter wrote that the definition should be, "Bunkered tank means a partially buried tank, the portion of which lies above grade is covered with earth, sand, gravel, asphalt, or other material."

Response to comments. EPA agrees that the commenter's proposed definition is clearer, and we have used it with slight editorial changes.

Editorial changes and clarifications. We added a sentence to the definition noting that bunkered tanks are a subset of aboveground storage containers for purposes of this part.

Completely Buried Tank—Proposed as "Underground Storage Tank"

Background. In 1991, we proposed adding a definition for "underground storage tank." It differed from the Underground Storage Tank (UST) program definition in 40 CFR part 280 because it excluded tanks which are partially buried or bunkered, as well as some other tanks or containers included within the part 280 definition, such as containers storing certain hazardous substances. Partially buried and bunkered tanks still have a potential to discharge oil into navigable waters, adjoining shorelines, or affecting natural resources. Therefore, we proposed to retain those tanks within our regulatory jurisdiction, while we proposed to exclude all completely buried tanks storing petroleum that are subject to all of the technical requirements of the UST program (40 CFR part 280 or a State program approved under 40 CFR part 281).

Comments. Consistency with the definition of underground tanks in 40 CFR part 280. One commenter supported the proposal. A number of commenters thought that the definitions of underground tanks in parts 112 and 280 should be consistent.

Vaulted tanks. Commenters divided on whether subterranean vaulted tanks should be considered ASTs or USTs. The commenter opposing the treatment of subterranean vaulted tanks as ASTs in the UST definition argued that discharges from those tanks pose no threat to the environment or public health.

Response to comments. Consistency with the definition of underground tanks in 40 CFR part 280. We disagree that the scope of the part 112 exclusion for underground tanks should be consistent with the scope of the definition of "underground storage tank" in part 280. The programs are designed for different purposes, therefore, the definitions used will necessarily differ. To eliminate confusion with the part 280 definition, we have changed the proposed part 112 definition of "underground storage tank" to "completely buried tank" in this final rule.

Part 280 includes within its UST definition tanks which have a volume up to ninety percent above the surface of the ground, which are considered aboveground tanks for part 112 purposes. Part 280 also regulates underground storage tanks containing hazardous substances, while the SPCC program regulates only facilities storing or using oil as defined in CWA section 311. The SPCC program regulates

facilities with relatively large completely buried storage capacity, while the bulk of facilities regulated under part 280 are small capacity facilities such as gasoline filling stations. The SPCC program also regulates other types of containers and facilities which part 280 excludes, such as: tanks used for storing heating oil for consumptive use on the premises where stored; certain pipeline complexes where oil is stored; and, oil-water separators.

Vaulted tanks. Aboveground vaulted tanks are clearly ASTs. While subterranean vaulted tanks may be completely below grade, they may not be completely covered with earth. Because of their design, they pose a threat of discharge into the environment, and are thus excluded from our definition of completely buried tank. Subterranean vaulted tanks are also excluded from the part 280 UST definition of underground tank if the storage tank is situated upon or above the surface of the floor in an underground are providing enough space for physical inspection of the exterior of the tank. Therefore, if subterranean tanks were excluded from our definition of completely buried tank, they would likely not be regulated at all, and thereby be likely to pose a greater threat to the environment.

Other completely buried tanks excluded from the part 280 UST definition. Tanks in underground rooms or above the floor surface, or in other underground areas such as basements, cellars, mine workings, drifts, shafts, or tunnels are also not considered USTs for purposes of the part 280 definition. The purpose of the part 112 definition is to clarify that these are tanks that are technically underground but that, in a practical sense, are no different from aboveground tanks. They are situated so that, to the same extent as tanks aboveground, physical inspection for leaks is possible. Also, some of these tanks are designed such that in case of a discharge, oil would escape to navigable waters or adjoining shorelines, a result which our program seeks to prevent.

Editorial changes and clarifications. The words "completely below grade and * * *" were added to the first sentence of the definition. The purpose of that revision was to distinguish completely buried tanks from partially buried and bunkered tanks, which break the grade of the land, but are not completely below grade. We further clarify that such tanks may be covered not only with earth, but with sand, gravel, asphalt, or other material. The clarification brings the definition into accord with the coverings noted in the definition of "bunkered tank." In the second sentence, the word "subterranean" was deleted from "subterranean vaults" because all vaulted tanks, whether subterranean or aboveground, are counted as aboveground tanks for purposes of this rule.

Contiguous Zone

Background. The definition of "contiguous zone" was proposed in 1991 to conform with 1978 amendments to the CWA, and the 1990 amendments to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) dealing with the scope of discharges. EPA received no substantive comments. Thus, we have finalized the proposed definition.

The contiguous zone is the area that extends nine miles seaward from the outer limit of the territorial sea. A presidential proclamation of December 17, 1988 (No. 5928, 54 FR 777, January 9, 1989) extended the territorial seas of the United States to 12 nautical miles from the baselines of the United States as determined in accordance with international law. However, the proclamation provided that nothing therein "extends or otherwise alters existing federal or state law or any jurisdiction, rights, legal interests, or obligations derived therefrom * * *."

Contract or Other Approved Means

Editorial changes and clarifications. We corrected the title of the definition to read "contract or other approved means," in place of "contract or other approved." We also changed some plural references to singular ones.

Discharge

Background. The 1991 proposed changes to the definition of "discharge" reflected changes to the statutory definition in the 1978 amendments to the CWA. For clarity, the words "of oil" were added in the first sentence because the definition applies only to discharges of oil.

Comments. One commenter asked for a clarification of the term "discharge." The commenter asked whether a drop of diesel fuel that fell onto the outside casing of a tank during refilling would be considered a "discharge," even if the oil did not reach the ground. Other commenters recommended that the definition include at least an imminent danger that the spilled material would reach a navigable waterway. Another commenter asked EPA to exempt from the definition those discharges regulated under the CWA, such as National Pollutant Discharge Elimination System (NPDES) discharges. The rationale was that any potential environmental impacts of these discharges have been considered in the issuance of a facility's NPDES permit and there is no reason to subject such facilities to dual regulation.

Response to comments. A discharge includes, but is not limited to, any "spilling, leaking, pumping, pouring, emitting, emptying, or dumping," of oil. A discharge as described in § 112.1(b) need not reach the level of an imminent danger to affected lands, waters, or resources to be a discharge. It includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any amount of oil no matter where it occurs. It may not be a reportable discharge under 40 CFR part 110 if oil never escapes the secondary containment at the facility and is promptly cleaned up. If the discharge escapes secondary containment, it may become a discharge as described in § 112.1(b), and if that happens, the discharge must then be reported to the National Response Center.

Foreseeable or chronic point source discharges that are permitted under section 402 of the CWA, and that are either due to causes associated with the manufacturing or other commercial activities in which the discharger is engaged or due to the operation of the treatment facilities required by the NPDES permit, are to be regulated under the NPDES program. Other oil discharges in reportable quantities are subject to the requirements of section 311 of the CWA. Such spills or discharges are governed by section 311 even where the discharger holds a valid and effective NPDES permit under CWA section 402. Therefore, a discharge of oil to a publicly owned treatment work (POTW) would not be a discharge under the § 112.2 definition if the discharge is in compliance with the provisions of the permit; or resulted from a circumstance identified and reviewed and made a part of the public record with respect to a permit issued or modified under section 402; or if it were a continuous or anticipated intermittent discharge from a point source, identified in a permit or permit application under section 402, which is caused by events occurring within the scope of relevant operating or treatment systems. 33 U.S.C. 1321(a)(2); 40 CFR 117.12. Otherwise, the discharge is subject to the provisions of section 311 of the CWA as well as the unpermitted discharge prohibition of section 301(a) of the CWA. 33 U.S.C. 1311(a).

Editorial changes and clarifications. We have revised the citation for the River and Harbor Act of 1899 so that it refers only to the U.S. Code, and have

deleted the reference to the Statutes at Large.

Facility

Background. Because we regulate facilities in the SPCC rule, we proposed a definition of "facility" in 1991. It is based on the Memorandum of Understanding (MOU) between the Secretary of DOT and the EPA Administrator, dated November 24, 1971 (36 FR 24080). A discussion of the types of facilities covered is found in Appendix A to this rule.

Comments. Facility boundaries. One commenter asked for clarification as to whether the facility is the petroleum storage site or a single tank at the site.

Electrical or operational equipment. Utility commenters argued that electrical equipment is not a facility because no oil is being stored in the equipment.

Buried pipelines, gathering lines, flowlines, waste treatment equipment. One commenter urged that buried pipelines at mining sites should be excluded from the definition because such pipelines are often put in place without recording their location. The commenter added that typically the lines are emptied and abandoned as part of final reclamation. Other commenters urged the exclusion of gathering lines and flowlines from the definition because of the cost of providing secondary containment and contingency planning for such lines. Another commenter protested the inclusion of waste treatment as a possible activity covered under the definition, and therefore the rule.

Mobile or fixed facilities. One commenter urged that mobile equipment be excluded from the definition because the commenter believed that the SPCC Plan would otherwise have to be amended each time the mobile equipment is moved.

Response to Comments. Facility boundaries. A facility includes any building, structure, installation, equipment, pipe or pipeline in oil well drilling operations, oil production, oil refining, oil storage, and waste treatment, or in which oil is used at a site, whether it is mobile or fixed. It may also include power rights of way connected to the facility. The extent of the facility will vary according to the circumstances of the site. It may be as small as a single container or as large as all of the structures and buildings on a site. Some specific factors to use in determining the extent of a facility may be the ownership or operation of those buildings, structures, equipment, installations, pipes or pipelines, or the types of activities being carried on at the facility.

Electrical or operational equipment. We disagree with commenters who maintained that electrical equipment "using" oil as opposed to "storing" it should not fall within the definition of "facility" in part 112. Section 311(j)(1)(C) of the CWA, which authorizes EPA to promulgate the SPCC rule, does not distinguish between the storage and the usage of oil. The section simply authorizes EPA, as delegated by the President, to establish "requirements to prevent discharges of oil * * * from onshore and offshore facilities, and to contain such discharges * * *." 33 U.S.C. 1321(j)(1)(C). Nor do the definitions of "onshore facility" or "offshore facility" in sections 311(a)(10) of the CWA distinguish between the use or storage of oil. Although the definition of "facility" in section 1001(9) of the OPA is limited by the "purpose" of the facility, no such limitation appears in CWA section 311. Moreover, EPA believes that although much of the electrical equipment may arguably "use" oil, in effect the oil is "stored" in the equipment because it remains in the equipment for such long time frames. We added language to the definition to clarify that such types of equipment are facilities subject to the SPCC rule whether they are storing or using oil. Therefore, we revised the definition to include the words "or in which oil is used." However, we note that a facility which contains only electrical equipment is not a bulk storage facility.

Buried pipelines, gathering lines, flowlines, waste treatment equipment. Buried pipelines that carry oil at mining sites are part of a facility unless they are permanently closed as defined in § 112.2. Such pipelines may otherwise be the source of a discharge as described in § 112.1(b). Likewise, the same rationale applies to gathering lines and flowlines, and waste treatment equipment. Note that any facility or part thereof used exclusively for wastewater treatment and not to satisfy any part 112 requirement is exempted from the rule. The production, recovery, or recycling of oil is not considered wastewater treatment for purposes of the rule. *See* § 112.1(d)(6).

While such gathering lines, flowlines, and waste treatment equipment are subject to secondary containment requirements, the appropriate method of secondary containment is an engineering question. Double-walled piping may be an option, but is not required by these rules. The owner or operator and Professional Engineer certifying the Plan should consider whether pursuant to good engineering practice, double-walled piping is the appropriate method of secondary containment according to good engineering practice. In determining whether to install double-walled piping versus an alternative method of secondary containment, you could consider such factors as the additional effectiveness of double-walled piping in preventing discharges, the technical aspects of cathodically protecting any buried double-walled piping system, the cost of installing double-walled pipe, and the potential fire and safety hazards of double-walled pipes. Earthen or natural structures may be acceptable if they contain and prevent discharges as described in § 112.1(b), including containment that prevents discharge of oil through groundwater that might cause a discharge as described in § 112.1(b). What is practical for one facility, however, might not work for another.

Mobile or fixed facilities. Either mobile or fixed equipment might be the source of a discharge as described in § 112.1(b), and therefore both are included within the definition of "facility." Section 112.3(c) of this rule already provides that it is not necessary to amend your Plan each time a mobile facility moves to a new site.

Editorial changes and clarifications. In the first sentence we added the words "oil gathering, oil processing, oil transfer, oil distribution" to the list of activities listed. The added activities track the activities listed in § 112.1(b). We also clarify that a vessel or a public vessel is not a facility or part of a facility. We deleted the word "may" in the second sentence of the definition regarding site-specific factors of facility boundaries, because it is redundant with the inclusion of the words, "including, but not limited to."

Fish and Wildlife and Sensitive Environments

Editorial changes and clarifications. We made four editorial changes. We deleted the word "either" in the first sentence because it is unnecessary. "Endangered/threatened species" becomes "endangered or threatened species." We also deleted the colon in the last sentence because it is unnecessary. "Discharges of oil" becomes "discharges."

Maximum Extent Practicable

Editorial changes and clarifications. In the first sentence the phrase "the limitations used to determine" becomes "within the limitations used to determine." In the beginning of second sentence, "It considers * * *." becomes "It includes* * *."

Navigable Waters

Background. We proposed a revision of the definition of "navigable waters" in 1991. The rationale was to have the part 112 definition track the definition of "navigable waters" in 40 CFR part 110, which deals with the discharge of oil.

Comments. Clarification of the meaning of navigable waters, maps. A number of commenters asked for a clarification of the definition of navigable waters because of the difficulty of determining which waters fall within the definition. Some asked for EPA maps to aid in this determination.

Navigability, legal authority. Other commenters believed that the definition related to navigability. Some thought the definition was legally unsupportable because it is so broad. One commenter suggested that the term be limited to unobstructed streams that free flow at least fourteen consecutive days per year.

Wetlands. Another commenter believed that the definition should not apply to wetlands because SPCC protections are not needed when wetlands are regulated under a permit program.

Response to comments. Clarification of the meaning of navigable waters, maps. In this definition, we clarify what we mean by navigable waters by describing the characteristics of navigable waters and by listing examples of navigable waters. We also note in the definition that certain waste treatment systems are not navigable waters.

We are unable to provide a map to identify all navigable waters because not all such waters have been identified on a map. However, the rule provides guidelines as to where such waters may be found.

Navigability, legal authority. Navigable waters are not only waters on which a craft may be sailed. Navigable waters include all waters with a past, present, or possible future use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Navigable waters also include intrastate waters which could affect interstate or foreign commerce. The case law supports a broad definition of navigable waters, such as the one published today, and that definition does not necessarily depend on navigability in fact.

Wetlands. We disagree that SPCC regulation of wetlands is redundant. The definition includes wetlands, as defined in § 112.2 and discussed below, because wetlands are waters of the United States. Different programs serve different purposes, and merely because an activity or function is regulated for one purpose (for example, NPDES) does not mean that regulation for another purpose is redundant. The purpose of a permit discharge system is waste treatment and management. The purpose of the SPCC rule is oil pollution prevention.

Offshore Facility

Background. EPA proposed in 1991 to revise the definition of "offshore facility" to conform with the CWA and NCP definitions.

Comments. EPA or DOI jurisdiction. One commenter noted that if the definition of offshore facility is taken in context with the definition of navigable waters, then many facilities traditionally subject to EPA jurisdiction would become subject to DOI authority.

CWA definition. Another commenter suggested that the EPA definition should instead be that contained in CWA section 311(a)(11).

Response to comments. EPA or DOI jurisdiction. The 1994 Memorandum of Understanding between DOI, DOT, and EPA addresses the jurisdictional issue to which the commenter refers, transferring to EPA those non-transportation-related offshore facilities landward of the coastline.

CWA definition. EPA agrees with the commenter urging that the EPA definition track the statutory definition. The part 112 definition, except for minor editorial changes, is identical to the CWA definition. There is no difference between the substance of the part 112 definition and the CWA definition.

Editorial changes and clarifications. Permanently moored vessels and other former transportation equipment. We also note that barges which store oil, and have been determined by the Coast Guard to be permanently moored, are no longer vessels, but storage containers that are part of an offshore facility. Likewise, a container, whether onshore or offshore, which was formerly used for transportation, such as a truck or railroad car, which now is used to store oil, is no longer used for a transportation purpose, and is a bulk storage container.

Oil

Background. In 1991, EPA reprinted the definition of oil without suggesting any changes. In response to Edible Oil Regulatory Reform Act (EORRA) of 1995 (33 U.S.C. 2720) requirements, we have reworded the definition to include the categories of oil included in EORRA. Those categories are: (1) Petroleum oils, (2) animal fats and vegetable oils; and, (3) other non-petroleum oils and greases. Animal fats include fats, oils, and greases of animal origin (for example, lard and tallow), fish (for example, cod liver oil), or marine mammal origin (for example, whale oil). Vegetable oils include oils of vegetable origin, including oils from seeds, nuts, fruits, and kernels. Examples of vegetable oils include: corn oil, rapeseed oil, coconut oil, palm oil, soy bean oil, sunflower seed oil, cottonseed oil, and peanut oil. Other non-petroleum oils and greases include coal tar, creosote, silicon fluids, pine oil, turpentine, and tall oils. Petroleum oils include crude and refined petroleum products, asphalt, gasoline, fuel oils, mineral oils, naphtha, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

EORRA requires that Federal agencies establish separate classes for at least these three types of oils. It further requires agencies to differentiate between those classes of oil in relation to their environmental effects, and their physical, chemical, biological, and other characteristics. EPA has provided new subparts within part 112 to facilitate differentiation between the categories of oil listed in EORRA. In an advance notice of proposed rulemaking, published on April 8, 1999 (64 FR 17227), we requested ideas on how to differentiate among the SPCC requirements for facilities storing or using the various categories of oil. These ideas for further differentiation will be considered in a future rulemaking.

Today's amendments to the definition and the creation of subparts have no effect on information collection, because we already include all types of oil in our information collection burden calculations. Similarly, the definition imposes no new requirements, because all oils have always been subject to the substantive requirements of the rule.

Comments. What is oil. Several commenters favored the proposed 1991 definition, which is identical to the current definition. Some asked for clarification as to its scope, particularly in reference to animal and vegetable oils, synthetic oils, mineral oils, and petroleum derivatives.

Specific substances. Others asked about specific substances like aromatic hydrocarbons and asphaltic cement. One commenter asked if bilge water is oil.

Authority. Some commenters suggested that EPA's authority did not extend beyond petroleum-based oils.

Exclusions. Some commenters sought exclusions from the definition, generally based on contentions that certain oils (such as vegetable oils) are not harmful

to the environment if discharged. One commenter suggested a definition based on the liquidity of oil, founded on a rationale that solid or gaseous oils do not pose a threat to waters of the United States when discharged at a fixed facility. Another commenter urged that we exempt refined petroleum products from the definition because releases from many of these products are regulated by other statutes, such as the Solid Waste Disposal Act. One State commenter noted that animal and vegetable oils are not subject to regulation under that State's statutes regulating oil.

Oil mixed with wastes or hazardous substances. Others asked for clarification as to whether mixed substances, used oil, and waste oils were oil.

Part 280 definition. One commenter noted the difference in definitions between the part 112 definition and the definition in 40 CFR part 280.

Response to comments. What is oil. EPA interprets the definition of oil to include all types of oil, in whatever form, solid or liquid. That includes synthetic oils, mineral oils, vegetable oils, animal fats, petroleum derivatives, etc.

Specific substances. As to certain specific substances, asphaltic cement is oil because it is a petroleum-based product and exhibits oil-like characteristics. A discharge of asphaltic cement may violate applicable water quality standards, or cause a film or sheen or discoloration 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. Aromatic hydrocarbons may or may not be oil, depending on their physical characteristics and environmental effects. Some aromatic hydrocarbons are hazardous substances. Bilge water that contains sufficient oil such that its discharge would violate the standards set out in 40 CFR 110.3 is considered oil. The percentage of oil concentration in the water is not determinative for the purpose of the definition or the discharge standards.

Authority. We disagree that our authority only extends to petroleum-based oils. Our interpretation is consistent with Congressional intent as expressed in section 311(a)(1) of the CWA, which extends to all types of oils in any form. EPA's definition tracks that statutory definition. Our revised definition also reflects EORRA requirements for differentiation. EORRA did not expand or contract the universe of substances that are oils, it only required differentiation, when necessary, between the requirements for facilities storing or using different types of oil.

Exclusions. While States may choose to regulate all oils or some oils, the CWA definition is designed to prevent the discharge of all oils.

A definition based on liquidity would exclude solid oils, such as certain animal fats, a result that would be inconsistent with Congressional intent. Concerning gaseous oils, see our discussion on *Highly volatile liquids* below.

While releases or discharges of some refined petroleum products may be regulated under the Solid Waste Disposal Act as waste products, that program is dedicated more to waste management, and does not regulate storage of non-waste oil.

All oils, including animal fats and vegetable oils, can harm the environment in many ways. Oil can coat the feathers of birds, the fur of mammals and cause drowning and hypothermia and increased vulnerability to starvation and predators from lack of mobility.

Oils can act on the epithelial tissue of fish, accumulate on gills, and prevent respiration. The oil coating of surface waters can interfere with natural processes, oxygen diffusion/reaeration and photosynthesis. Organisms and algae coated with oil may settle to the bottom with suspended solids along with other oily substances that can destroy benthic organisms and interfere with spawning areas.

Oils can increase biological or chemical oxygen demand and deplete the water of oxygen sufficiently to kill fish and other aquatic organisms.

Oils can cause starvation of fish and wildlife by coating food and depleting the food supply. Animals that ingest large amounts of oil through contaminated food or preening themselves may die as a result of the ingested oil. Animals can also starve because of increased energy demands needed to maintain body temperature when they are coated with oil.

Oils can exert a direct toxic action on fish, wildlife, or their food supply. Oils can taint the flavor of fish for human consumption and cause intestinal lesions in fish from laxative properties. Tainted flavor of fish used for human consumption and the causation of rancid odors are public health or welfare concerns within the scope of our rules. Tainted flavor of fish used for human consumption may indicate a disease in the fish which could render them inedible and thus have a substantial impact on the fishermen who harvest them and communities who may rely on them for a food supply.

Oils can foul shorelines and beaches. Oil discharges can create rancid odors. Rancid odors may cause both health impacts and environmental impacts. For example, the 1991 Wisconsin Butter Fire and Spill resulted in a discharge of melted butter and lard. After the cleanup was largely completed, the Wisconsin Department of Natural Resources declared as hazardous substances the thousands of gallons of melted butter that ran offsite and the mountain of damaged and charred meat products spoiling in the hot sun and creating objectionable odors. The Wisconsin DNR stated that these products posed an imminent threat to human health and the environment. 62 FR 54526.

Highly volatile liquids. We do not consider highly volatile liquids that volatilize on contact with air or water, such as liquid natural gas, or liquid petroleum gas, to be oil. Such substances do not violate applicable water quality standards, do not cause a reportable film or sheen or discoloration upon the surface of water or adjoining shorelines, do not cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines, and are not removable. Therefore, there would be no reportable discharge as described in 40 CFR 110.3.

Oil mixed with wastes or hazardous substances. 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.

Part 280 definition. The definition of petroleum in 40 CFR part 280 is a subset of the part 112 definition of "oil." The part 112 definition of oil is broader than the part 280 definition of petroleum because part 112 regulates all types of oils, whereas part 280 regulates only petroleum.

Oil drilling, production, or workover facilities (offshore)

Background. See the definition of "production facility," into which this definition has been merged.

Oil Production Facilities (Onshore)

Background. See the definition of "production facility," into which this definition has been merged.

Onshore Facility

Background. As proposed, we deleted as unnecessary surplus the reference to the facility not being transportation-

related. There were no substantive comments.

Partially Buried Tank

Background. In 1991, EPA proposed the definition of "partially buried tank" to clarify the distinction between partially buried tanks and underground storage tanks. We have renamed underground tanks in this rule as "completely buried tanks," i.e., those tanks completely covered with earth. Partially buried tanks are subject to the SPCC rule the same as aboveground containers.

Comments. One commenter wrote that the definition as proposed was "undecipherable" and should be rewritten. That commenter suggested another definition for clarity. Two other commenters suggested that we adopt the part 280 UST definition for partially buried tank, which includes any tank system such as tank and piping which has a volume of 10 percent or more beneath the surface of the ground.

Response to comments. We agree that the definition could be clearer and have clarified it. We decline to adopt the part 280 UST definition (at 40 CFR 280.12) and to classify partially buried tanks as completely buried tanks, because they are not. The UST definition might also exclude some tanks or containers which would be covered by the SPCC definition. The UST definition includes tanks whose volume (including the volume of underground pipes connected thereto) are 10 percent or more beneath the surface of the ground. The SPCC definition of "partially buried tank" contains no volume percentage and applies to any tank that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth.

Editorial changes and clarifications. We clarify that partially buried tanks may be covered not only with earth, but with sand, gravel, asphalt, or other material. The clarification brings the definition into accord with the coverings noted in the definition of "bunkered tank." We added a sentence to the definition noting that partially buried tanks are considered aboveground storage containers for purposes of this part.

Permanently Closed

Background. EPA proposed a definition of "permanently closed" in 1991 to clarify the scope of facilities and tanks or containers excluded from coverage under the SPCC rule. Permanently closed containers are those containers which are no longer capable of storing or using oil. Permanently closed facilities are those facilities which are no longer capable of storing or using oil.

In permanently closed containers and facilities, physical changes have been made so that storage capacity or use is rendered impossible. Therefore, the definition describes those changes which must have occurred before a container or facility is "permanently closed."

Comments. In general. Several commenters favored the proposed definition. Others opposed it as unnecessary, believing that "if a tank is not used for the storage of oil, it simply is not subject to the provisions of the SPCC regulations." Finally, several commenters suggested that the definition specifically exclude temporarily closed tanks.

Waste disposal. Several commenters urged that the part of the proposal that dealt with waste disposal be deleted because waste disposal is already covered under other programs and should not be a concern of spill prevention unless flowable oil is part of the waste.

Non-oil products. One commenter asked for clarification that a container which is no longer used for oil but is used for some non-oil product be considered permanently closed.

Connecting lines. Another commenter asked for clarification as to the meaning of connecting lines. The commenter assumed that connecting lines means the sections of pipe that run between the tank and the nearest block valve.

Explosive vapors. Numerous commenters urged that EPA delete any rules dealing with explosive vapors on the theory that such vapors are regulated by the Occupational Health and Safety Administration (OSHA) program and other programs. Many of these same commenters suggested that placing a sign on a tank indicating that it has been freed of gas is not a good safety practice because gas might subsequently build up within the tank with catastrophic results.

Retroactivity. Several commenters suggested that the requirements for a tank to be permanently closed should not be applied retroactively to tanks previously removed from service. The rationale was that the cost would be prohibitive, although commenters did not provide specific cost estimates, and that it might cause confusion as to which tanks would have to be included in facility capacity calculations. These commenters also asserted that such tanks have been abandoned and empty, sometimes for many years, and pose no threat of discharge.

Response to comments. In general. A definition is necessary to clarify when a container is permanently closed and no longer used for the storage of oil. Containers that are only closed temporarily may be returned to storage purposes and thus may present a threat of discharge. Therefore, they will continue to be subject to the rule.

Waste disposal. Reference to waste disposal in accordance with Federal and State rules in proposed § 112.2(o)(1) was deleted as unnecessary surplus. EPA agrees that other programs adequately handle waste disposal.

Non-oil products. Containers that store products other than oil and never store oil, are not subject to the SPCC rule whether they are "permanently closed" as defined or not. If the containers sometimes store oil and sometimes store non-oil products, they are subject to the rule.

Connecting lines. We agree with the commenter's assumed definition of connecting lines. Connecting lines that have been emptied of oil, and have been disconnected and blanked off, are considered permanently closed.

Explosive vapors. We deleted proposed § 112.2(o)(2) on the suggestion of commenters that references to explosive vapors are an OSHA matter and inappropriate for EPA rules. We modified proposed § 112.2(o)(3) to eliminate the reference to signs warning that "vapors above the LEL are not present," because the operator cannot guarantee that warning remains correct. To help prevent a buildup of explosive vapors, we have revised the definition to provide that ventilation valves need not be closed. We agree with commenters that a sign might be misleading and dangerous.

Retroactivity. We believe that containers that have been permanently closed according to the standards prescribed in the rule qualify for the designation of "permanently closed," whether they have been closed before or after the effective date of the rule. Containers that cannot meet the standards prescribed in the rule will not qualify as permanently closed. We disagree that the cost of such closure is prohibitive. We have simplified the proposal and deleted the proposed requirement to render the tank free of explosive vapor. Therefore, costs are lower. To clarify when a container has been closed, we have amended the rule to require that the sign noting closure show the date of such closure. The date of such closure must be noted whether it occurred before or after the effective date of this provision. Some States and localities require a permit for tank closure. A document noting a State closure inspection may serve as

evidence of container closure if it is dated.

Industry standards. Industry standards that may be useful to effect the permanent closure of containers or facilities include: (1) National Fire Protection Association (NFPA) 30, "Flammable and Combustible Liquids Code"; (2) Building Officials and Code Administrators International (BOCA), "National Fire Prevention Code"; (3) American Petroleum Institute (API) Standard 2015, "Safe Entry and Cleaning of Petroleum Storage Tanks"; and, (4) API Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks."

Editorial changes and clarifications. "Tank" becomes "container." We revised the introduction to the definition to remove the phrase "that has been closed" because the definition would have been circular with that language. Instead the introduction references the events which must have occurred in order for a container to meet the definition.

Person

Background. The definition of "person" proposed in 1991 was substantively unchanged from the current rule.

Comments. We received one comment which urged that we should make clear that the United States is bound by every provision of these rules.

Response to comments. See the discussion above (at § 112.1(c)) for the applicability of the rule to Federal agencies and facilities.

Production Facility

Background. The definition of "production facility" replaces two definitions in the proposed rule, i.e., Oil drilling, production, or workover facilities (offshore), proposed § 112.2(j), and Oil production facilities (onshore), proposed § 112.2(k). We replaced the two proposed definitions with the revised definition for editorial brevity as the proposed definitions contained many identical elements. This editorial effort effects no substantive changes in the requirements for the particular types of production facilities. Each facility must follow the requirements applicable to that facility, which is generally based on its operations, for example, a workover facility.

Comments. Flowlines and gathering lines. Several commenters suggested that flowlines and gathering lines should be deleted from the definition because they believed that the installation of structures and equipment to prevent discharged oil from reaching navigable waters is not practicable for flowlines and gathering lines.

Wells and separators. Other commenters also argued for the exemption of wells and separators.

DOT definition. Another commenter urged consistency between the proposed EPA definition and the DOT definition found at 49 CFR 195.2.

Single oil or gas field, single operator. One commenter asserted that the inclusion of the phrases "in a single oil or gas field" and "operated by a single operator" in the definition is confounding. The commenter urged that the producing segment of the industry needs to be able to combine facilities into one SPCC Plan with an identification of the wells to which that Plan applies. The commenter questioned whether the inclusion of the word "single" would preclude an operator's ability to do so.

Natural gas. Another commenter asked for clarification that natural gas processing facilities are not subject to rules for oil facilities.

Response to comments. Flowlines and gathering lines. Wells and separators. EPA disagrees that flowlines and gathering lines, as well as wells and separators, should be excluded from the definition. These structures or equipment are integral parts of production facilities and should therefore be included in the definition. We also disagree with the argument that because the installation of structures and equipment to prevent discharges around gathering lines and flowlines may not be practicable, EPA will be flooded with contingency plans. First of all, secondary containment may be practicable. In § 112.7(c), we list sorbent materials, drainage systems, and other equipment as possible forms of secondary containment systems. We realize that in many cases, secondary containment may not be practicable. If secondary containment is not practicable, you must provide in your SPCC Plan a contingency plan following the provisions of part 109, and otherwise comply with § 112.7(d). We have deleted the proposed 1993 provision that would have required you to provide contingency plans as a matter of course to the Regional Administrator. Therefore, you will rarely have to submit a contingency plan to EPA. The contingency plan you do provide in your SPCC Plan when secondary containment is not practicable for flowlines and gathering lines should rely on strong maintenance, corrosion protection, testing, recordkeeping, and inspection procedures to prevent and quickly detect discharges from such lines. It should also provide for the quick availability of response equipment.

DOT definition. We changed the proposed definition to be more consistent with the DOT definition, found at 49 CFR 195.2, in response to a commenter who urged consistency in EPA and DOT definitions. We added the uses of the piping and equipment detailed in DOT rule to our proposal, for example, "production, extraction, recovery, lifting, stabilization, separation, or treating" of oil. The terms "separation equipment," used in the proposed definition of "oil production facilities (onshore)", and "workover equipment," used in the proposed definition of "oil drilling, production, or workover facilities (offshore)", were combined into a generic "equipment." However, we also modified the proposed definition to reflect EPA jurisdiction. We added the word "structure," which was not in the DOT definition, to cover necessary parts of a production facility. We also added examples of types of piping, structures, and equipment. These examples are not an exclusive list of the possible piping, structures, or equipment covered under the definition. The new definition encompasses all those facilities that would have been covered under both former proposed definitions. As we proposed in 1991, and as in the current rule, we have retained geographic and ownership limitations.

Single oil or gas field, single operator. "A single geographical oil or gas field" may consist of one or more natural formations containing oil. The determination of its boundaries is area-specific. Such formation may underlie one or many facilities, regardless of whether any natural or man-made physical geographical barriers on the surface intervene such as a mountain range, river, or road. We disagree that the term "a single operator" is confusing. An "owner" or "operator" is defined in § 112.2 as 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 such facility immediately prior to abandonment." A "person" is not restricted to a single natural person. "Person" is a defined term in the rule (at § 112.2) which includes an individual, firm, corporation, association, or partnership.

Nothing in the definition would preclude an owner or operator from combining elements of a production facility into one SPCC Plan with an identification of the wells to which that Plan applies.

Natural gas. Because natural gas is not oil, natural gas facilities that do not store or use oil are not covered by this rule. However, you should note, that drip or condensate from natural gas production is an oil. The storage of such drip or condensate must be included in the calculation of oil stored or used at the facility.

Editorial changes and clarifications. One commenter suggested that the definitions proposed were ambiguous because of the use of the words "may include." We have eliminated the potential ambiguity caused by the words "may include" by revising the definition with the words "Production facility means."

Regional Administrator

Background. In 1991, we proposed a definition of "Regional Administrator" that was substantively unchanged from the current rule. In the final rule, we have deleted language concerning the "designee" of the EPA Regional Administrator because the language is unnecessary. Since the Regional Administrator has authority to delegate most functions, the term "designee" is almost always implied. When he does not have authority to delegate a function, the term "designee" is likewise unnecessary. We received no substantive comments.

Repair

Background. In 1993, we proposed a definition of "repair" in conjunction with the proposed rule for brittle fracture evaluation.

Comments. Ordinary maintenance. Two commenters asked for clarification of the term "repair," so that it would exclude ordinary day-to-day maintenance activities which are conducted to maintain the functional integrity of the tank. Another asked that the infinitive "to maintain" be deleted from the definition of repair so that evaluation for brittle fracture would not be required after ordinary, day-to-day maintenance.

Related equipment. Another commenter suggested that we conform the proposed definition of "repair" with the API 653 definition, specifically deleting the phase "or related equipment."

Response to comments. Ordinary maintenance. Some repairs in the nature of ordinary maintenance that do not weaken the integrity of the container might not necessitate brittle fracture evaluation. "Repair" means any work necessary to maintain or restore a container or related equipment to a condition suitable for safe operation. Typical examples of a repair that would trigger a brittle fracture evaluation include the removal and replacement of material (such as roof, shell, or bottom material, including weld metal) to maintain tank integrity; the re-leveling or jacking of a tank shell, bottom, or roof; the addition of reinforcing plates to existing shell penetrations; and the repair of flaws, such as tears or gouges, by grinding or gouging followed by welding. The definition of "repair" also includes reconstruction. Reconstruction means the work necessary to reassemble a container that has been dismantled and relocated to a new site. We have amended the definition to reflect that ordinary, day-to-day maintenance that does not weaken the integrity of the container will not trigger the brittle fracture evaluation requirement.

Related equipment. We agree with the commenter and will not include the term "or related equipment" in the definition to conform with API Standard 653, which does not include repairs of related equipment as a criterion for a brittle fracture evaluation.

Industry standards. Industry standards that may be helpful in understanding the definition of repair (and reconstruction) include API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction."

Editorial changes and clarifications. "Tank" becomes "container."

Spill Event

Background. In 1991, we proposed to modify the definition of "spill event" to correspond to the changes described in the applicability section of this rule (i.e., § 112.1(b)) relating to the expanded scope of CWA jurisdiction.

Comments. One commenter opposed the definition without explaining why. Several commenters argued that the definition should apply only to discharges to navigable waters.

Response to comments. We have withdrawn the proposed definition of "spill event," and have also deleted the term from the rule. We take this action because the term is not mentioned in the CWA and is unnecessary. The term is unnecessary because the word "discharge" is adequate. "Discharge" is the term used in the CWA. A discharge as described in § 112.1(b) is the same as a spill event. As to the comment on EPA jurisdiction, we disagree that our jurisdiction should apply only to discharges to navigable waters because the CWA establishes our jurisdiction beyond navigable waters (see the discussion under § 112.1(b)), and we have the responsibility to protect the environment within the scope of our statutory jurisdiction.

Spill Prevention, Control, and Countermeasure Plan, SPCC Plan or Plan

Background. In 1997, we reproposed the definition of "SPCC Plan" and withdrew the 1991 proposal. The 1997 proposal would broaden the acceptable formats of SPCC Plans, eliminating the requirement that the Plan meet the format or sequence formerly specified in the rule.

Comments. Editorial changes and clarifications. One commenter suggested that the last two sentences in the proposed definition should be deleted because they contain substantive requirements, and relocated to § 112.7. Another commenter thought that the SPCC definition should be revised to say that the Plan documents spill prevention measures and not compliance with the rule, because compliance is determined by comparing the contents of the Plan with the rules.

Response Plan. A few commenters opposed the definition on the theory that it constitutes a type of response plan. Those commenters argued that the thrust of the definition should be on spill containment, not paperwork.

Acceptable formats. Many commenters favored the proposal. Several suggested various formats that might qualify such as Integrated Contingency Plans, State Plans, Electrical Equipment Area Response Plans, Stormwater Pollution Prevention Plans, and others. One commenter thought that EPA should specify acceptable formats. Several commenters suggested that various formats such as Integrated Contingency Plans and State Plans are presumptively acceptable.

Response to comments. Response Plan. We disagree that the proposed definition constitutes a "response plan." The definition results in no substantive changes in response planning requirements.

Acceptable formats. We agree that any equivalent prevention plan acceptable to the Regional Administrator qualifies as an SPCC Plan as long as it meets all Federal requirements (including certification by a Professional Engineer), and is cross-referenced from the requirement in part 112 to the page of the equivalent plan. We do not agree that we should specify acceptable formats. We will give examples of those acceptable formats, but those examples are not meant to be exhaustive.

Examples of an "equivalent prevention plan" might be, for instance, an Integrated Contingency Plan (ICP), a State plan, a Best Management Practice Plan (which is a component of the Stormwater Pollution Prevention Plan),

or other plan that meets all the requirements of part 112 and is supplemented by a cross-reference section identifying the location of elements in part 112 to the equivalent requirement in the other plan. We repeat EPA's commitment to the ICP format, and encourage owners or operators to use it. If the equivalent prevention plan has no requirement that a Professional Engineer certify it, it will be necessary to secure proper certification from the Professional Engineer to comply with the SPCC rule.

An equivalent Plan might be a Plan following the SPCC sequence in effect before this final rule became effective. If you choose to use the sequence of the rule currently in effect, you may do so, but you must cross-reference the requirements in the revised rule to the sequence used in your Plan. We have provided a table in section IV.A of today's preamble to help you cross-reference the requirements more easily. If the only change you make is the addition of cross-referencing, you need not have a Professional Engineer certify that change.

Another example of an equivalent plan might include a multi-facility plan for operating equipment. This type of plan is intended for electrical utility transmission systems, electrical cable systems, and similar facilities which might aggregate equipment located in diverse areas into one plan. Examples of operating equipment containing oil include electrical equipment such as substations, transformers, capacitors, buried cable equipment, and oil circuit breakers.

A general, multi-facility plan for operational equipment used in various manufacturing processes containing over the threshold amount of oil might also be acceptable as an SPCC Plan. Examples of operating equipment used in manufacturing that contains oil include small lube oil systems, fat traps, hydraulic power presses, hydraulic pumps, injection molding machines, auto boosters, certain metalworking machinery and associated fluid transfer systems, and oil based heaters. Whenever you add or remove operating equipment in your Plan that materially affects the potential for a discharge as described in § 112.1(b), you must amend your Plan. 40 CFR 112.5(a).

Multi-facility plans would include all elements required for individual plans. Site-specific information would be required for all equipment included in each plan. However, the site-specific information might be maintained in a separate location, such as a central office, or an electronic data base, as long as such information was immediately accessible to responders and inspectors. If you keep the information in an electronic data base, you must also keep a paper or other backup that is immediately accessible for emergency response purposes, or for EPA inspectors, in case the computer is not functioning. Where you place that site-specific information would be a question of allowable formatting, as is the question of what is an "equivalent" plan; an issue subject to RA discretion.

Still another example of an equivalent plan might be a Best Management Practice Plan (BMP) plan prepared under an NPDES permit, if the plan provides protections equivalent to SPCC Plans. Not all BMP plans will qualify, as some BMP plans might not provide equivalent protection. NPDES permits without BMP plans would not qualify.

BMP plans are additional conditions which may supplement effluent limitations in NPDES permits. Under section 402(a)(1) of the CWA, BMP plans may be imposed when the Administrator determines that such conditions are necessary to carry out the provisions of the Act. *See* 40 CFR 122.44(k). CWA section 304(e) authorizes EPA to promulgate BMP plans as effluent limitations guidelines. NPDES rules provide for BMP plans when: authorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances; numeric limitations are infeasible; or, the practices are reasonably necessary to achieve effluent limitations and standards to carry out the purposes of the CWA.

Any format that contains all the required elements of an SPCC Plan and provides equivalent environmental protection would be presumptively acceptable. The final decision on what is an "equivalent" plan, however, would be at the discretion of the Regional Administrator. "Equivalence" would not mean that an alternate format would be the mirror image of an SPCC Plan, but it would have to contain all the required elements of an SPCC Plan. Required elements include, but are not limited to, provisions for a written plan, secondary containment or a contingency plan following 40 CFR part 109, equivalent inspections and tests, security, personnel training, and certification of the plan by a Professional Engineer. Acceptance of an equivalent plan does not, however, imply any type of approval or submission process. As before, SPCC Plans are generally not submitted to the Regional Administrator. The Regional Administrator could accept an equivalent prevention plan if it: (1) meets all regulatory requirements in the SPCC rule; and (2) is supplemented by a cross-reference section identifying requirements listed in part 112 to the equivalent requirements in the other prevention plan. Partial use of other equivalent prevention plans is also acceptable, if the plan is supplemented by elements that meet the remainder of the EPA requirements contained in part 112.

Written Plans. We agree that a "written" Plan might also include texts, graphs, charts, maps, photos, and tables, on whatever media, including floppy disk, CD, hard drive, and tape storage, that allows the document to be easily accessed, comprehended, distributed, viewed, updated, and printed. Whatever medium you use, however, must be readily accessible to response personnel in an emergency. If it is produced in a medium that is not readily accessible in an emergency, it must be also available in a medium that is. For example, a Plan might be electronically produced, but computers fail and may not be operable in an emergency. For an electronic Plan or Plan produced in some other medium, therefore, a backup copy must be readily available on paper. At least one version of the Plan should be written in English so that it will be readily understood by an EPA inspector.

Editorial changes and clarifications. The word "guidelines" was replaced with "requirements," as proposed in 1991. EPA agrees with the relocation of the last two sentences of the definition. Therefore, we have transferred those sentences to the introduction of § 112.7, in order to maintain the principle that definitions should not contain substantive requirements. We have also changed the last sentence which was proposed as "* * * provide adequate countermeasures to an oil spill" to read "* * * provide adequate countermeasures to a discharge." We agree that the Plan does not document compliance, but merely spill prevention measures and have deleted the sentence noting that the Plan documents compliance with the rules. Compliance is determined by comparing the contents of the Plan with the regulations.

Storage capacity

Background. In 1991, we proposed a definition of "storage capacity" to clarify that it includes the total capacity of a container capable of storing oil or oil mixtures. We explained that because the percentage of oil in a mixture is determined by the operator and can be changed at will, the total capacity of a container is considered in determining applicability under this part, regardless of whether the container is filled with

oil or a mixture of oil and another substance, as long as a discharge from such container could violate the harmful quantity standards in 40 CFR part 110.

Comments. In general. One commenter strongly favored the proposal.

Standard of measurement. One commenter asserted that volume was the proper measure of storage capacity, not total capacity. Another commenter suggested a "working capacity" standard. Other commenters argued that the definition should apply only to containers meeting the definition of a bulk storage tank, and that only the oil storage capacity of the container be considered. Similarly, a commenter asserted that the "design capacity" of a container is what should count as storage capacity because electrical equipment or other interior components might reduce the volume of oil capable of being stored.

Exclusions—small containers; waste treatment facilities, secondary containment containers. Small containers. Most commenters were opposed to the proposed definition because they either wanted an exclusion for small containers or because they wanted an exclusion for containers containing de minimis amounts of oil. These commenters argued that small containers would not present a significant threat of discharge.

Waste treatment facilities. The rationale of commenters supporting an exemption for waste treatment containers was that some containers had non-usable space at the top of the container; also some containers contain only trace amounts of oil. Therefore, for example, storage tanks used to store or treat wastewaters are likely to have to be considered when determining storage capacity since many wastewaters have incidental oil content prior to treatment. They also argued that the definition would subject publicly owned treatment works (POTWs) to the rule because tanks used to control stormwater surges might contain small amounts of oil from runoff from parking lots and city streets.

Secondary containment containers. Some commenters argued that the definition would apply to tanks used to provide secondary containment when determining the storage capacity of a facility.

Response to comments. Standard of measurement. In most instances the shell capacity of a container will define its storage capacity. The shell capacity (or nominal or gross capacity) is the amount of oil that a container is designed to hold. If a certain portion of a container is incapable of storing oil because of its integral design, for example electrical equipment or other interior component might take up space, then the shell capacity of the container is reduced to the volume the container might hold. When the integral design of a container has been altered by actions such as drilling a hole in the side of the container so that it cannot hold oil above that point, shell capacity remains the measure of storage capacity because such alteration can be altered again at will to restore the former storage capacity. When the alteration is an action such as the installation of a double bottom or new floor to the container, the integral design of the container has changed, and may result in a reduction in shell capacity. We disagree that operating volume should be the measurement, because the operating volume of a tank can be changed at will to below its shell capacity.

The keys to the definition are the availability of the container for drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil, and whether it is available for one of those uses or whether it is permanently closed. Containers available for one of the above described uses count towards storage capacity, those not used for these activities do not. Types of containers counted as storage capacity would include some flow-through separators, tanks used for "emergency" storage, transformers, and other oil-filled equipment.

Exclusions—small containers; waste treatment facilities. Small containers. This definition is applicable to both large and small storage and use capacity. Owners or operators of small facilities above the regulatory threshold are subject to the rule, and need to know how to calculate their storage or use capacity.

However, in the applicability section of the rule, we have excluded containers of less than 55 gallons from the scope of the SPCC rule, addressing the comments of those commenters who argued for a minimum container size. See § 112.1(d)(5). A container above that size that is available for use or storage containing even small volumes of oil must be counted in storage capacity.

Waste treatment facilities. We agree with the commenter that a facility or part thereof (except at an oil production, oil recovery, or oil recycling facility) used exclusively for wastewater treatment system and not to meet any part 112 requirement should not be considered storage capacity because wastewater treatment is neither use nor storage of oil. Therefore, we have exempted such facilities or parts thereof from the rule. However, note that certain parts of such facilities may continue to be subject to the rule. *See* the discussion under § 112.1(d)(6).

Secondary containment containers. Containers which are used for secondary containment and not storage or use, are not counted as storage capacity.

Editorial changes and clarifications. We use the word "container" instead of "tank or container," because a tank is a type of container. We have clarified the definition to provide that the storage capacity of a container is the volume of oil that the container could hold, and have therefore substituted the words "shell capacity" of the container for "total capacity." This is merely a clarification, and not a substantive change. We also deleted the words "for purposes of determining applicability of this part," because the words were unnecessary. We also deleted the last phrase of the proposed definition, "whether the tank or container is filled with oil or a mixture of oil and other substances," because the contents of the container do not affect the definition of its shell capacity.

Transportation-related and non-transportation-related

Background. In 1991, we reproposed the current definition of "transportation-related and non-transportation-related." We received no comments on the proposal. Therefore, we have promulgated the definition as proposed.

United States

Background. In 1991, we proposed to revise the definition of "United States" to conform to the definition enacted in the 1978 amendments to the CWA. We received no comments on this proposal. Therefore, we have promulgated the definition as proposed.

Vessel

Background. In 1991, we reproposed the current definition of vessel. We received no comments on this proposal. Therefore, we have promulgated the definition as proposed. We note that a barge or other watercraft that has been determined by the Coast Guard to be permanently moored to the shore, and used for storage, is no longer being used as a vessel, and does not fit within the definition of vessel. Rather, it becomes a bulk storage container counted as storage capacity. The same concept is found in the rules for mobile facilities at § 112.3(c), which provides that SPCC Plans apply to mobile facilities only

"while the facility is in a fixed (non-transportation) operating mode."

Wetlands

Background. In 1991, we proposed a definition of "wetlands" to define the term as used in the definition of "navigable waters." The definition of wetlands conforms to the definition in 40 CFR part 110 relating to the discharge of oil.

Comments. Several commenters opposed the definition because they believe that it includes a series of examples which may or may not be correct. They also alleged that the definition fails to implement the 1987 U.S. Army Corps of Engineers Wetlands Manual or the documents implementing that Manual. Another commenter asked for EPA clarification of what is a wetland, given the "vague and arguable notion of a wetland."

Response to comments. The examples listed in the definition are intended to help the reader with guidelines to identify wetlands. While the examples generally represent types of wetlands, they are not intended to be a categorical listing of such wetlands. There may be examples listed that under some circumstances do not constitute wetlands. We believe that the 1987 Wetlands Manual is a useful source material for wetlands guidance. It would be impossible to specify in a rule every type of situation where wetlands occur. The examples listed in the definition are not exclusive, but provide help in clarifying what may be a wetland.

Section 112.3 Introduction

Background. We have added an introduction to § 112.3 as an editorial device to simplify the language in the paragraphs of this section.

Section 112.3(a)—Time Line for Preparation and Implementation of Plans for Existing Facilities

Background. In 1991, we proposed to require owners or operators of onshore and offshore facilities in operation 60 days after the effective date of this final rule to "maintain a prepared and fully implemented facility SPCC Plan. . . ." We proposed giving these owners or operators 60 days from the date the final rule was published to revise their existing Plans and implement the revisions. The proposed rule also reflected the expanded geographic scope of the rule provided by CWA amendments.

Comments. Time period to prepare and implement a Plan. A number of commenters favored the proposal. Many more favored a "phase-in" period, or a longer period within which to comply. Commenters suggested compliance periods ranging from 60 days to 7 years. Many commenters clustered around the suggestion that a 6 month phase-in period be allowed. Many others suggested compliance by the next three-year review, as required by § 112.5(b) at that time.

Extensions. Several commenters asked that extensions of time to prepare and implement Plans be automatic if Plans must be in effect prior to the commencement of operations. Another suggested that extension requests be considered "routine."

Acquired facilities. One commenter asked how we would treat acquired facilities, whether as new or continuing operation facilities.

Start of operations. One commenter asked when operations start, stating that is not always a clearly defined time. The commenter suggested that instead of requiring a prepared and implemented Plan, we should allow that a response team be in place.

Small facilities. One commenter asserted that the time line for Plan preparation and implementation was unreasonable for small facilities, and asked that facilities with under 10,000-gallon capacity be allowed to operate while developing and implementing a Plan.

Response to comments. Time period to prepare and implement a Plan. We have been persuaded by commenters that a longer phase-in period than 60 days is required for facilities currently in operation or about to become operational within one year after the effective date of this rule.

Facilities currently in operation. For a facility in operation on the effective date of this rule, we changed the dates in the proposed rule for preparation and implementation of plans from 60 days to a maximum of one year to accord with the time frames in the current rule. The owner or operator of a facility in operation on the effective date of this rule will have 6 months to amend his Plan and must fully implement any amendment as soon as possible, but within one year of the effective date of the rule at the latest. The owner or operator of a facility which has had a discharge as described in § 112.1(b), or reasonably could be expected to have one, already has an obligation to prepare and implement a Plan.

For example, an owner or operator whose facility became operational four years before the effective date of this rule is the owner or operator of a facility currently in operation on the effective date of this rule. He is therefore subject to current § 112.3(b), and should have prepared his Plan no later than three and one half years before the effective date of this rule, and fully implemented it no later than three years before the effective date of this rule. Assuming that he still has not prepared a Plan on the effective date of the rule, he must prepare and fully implement a Plan immediately that meets the requirements of the revised rule. He is subject to penalties for violation of current § 112.3(b) until he does so, and the penalties would accrue from the time the original deadlines passed before the effective date of this rule. The owner or operator of a facility which became operational four years before the effective date of the rule, and who prepared and fully implemented his Plan in compliance with current § 112.3(b), must amend his Plan within 6 months of the effective date of this rule to meet the requirements of the revised rule, and fully implement the amended Plan as soon as possible, but no later than one year after the effective date of the rule.

An owner or operator whose facility became operational 7 months before the effective date of the rule is an owner or operator of a facility currently in operation and is therefore subject to current § 112.3(b). He should have prepared his Plan one month before the effective date of this rule. If he did, he will have 6 months from the effective date of this rule to amend that Plan to meet the requirements of the revised rule, and must fully implement the amended Plan as soon as possible, but within one year of the effective date of this rule. If he has not prepared a Plan by the effective date of the current rule as required, then he must prepare and fully implement a Plan immediately that meets the requirements of the revised rule. He is subject to penalties for violation of current § 112.3(b) until he does so.

An owner or operator whose facility became operational 4 months before the effective date of this rule is also an owner or operator of a facility currently in operation on the effective date of this rule and therefore subject to the current rule. However, in this case, the 6-month deadline to prepare a Plan under the current § 112.3(b) has not yet passed. Therefore, the owner or operator is subject to the Plan preparation and implementation deadlines in § 112.3(a) of the revised rule. He now has 6 months from the effective date of this rule to prepare a Plan that meets the requirements of this rule. If he had already prepared a Plan under current § 112.3(b), he has 6 months from the effective date of this rule to amend that Plan. In either case, he must fully implement the Plan (or amended Plan)

as soon as possible after the 6-month Plan preparation deadline of this rule, but no later than one year after the effective date of this rule.

The owner or operator of a facility in operation on the effective date of this rule who is required to have prepared or implemented an SPCC Plan, but has not, remains subject to penalties for violation of current SPCC regulations. Such owner or operator is consequently subject to civil penalties for a violation of current § 112.3 if the time has expired for preparation or implementation of his Plan.

Facilities becoming operational within one year after the effective date of the rule August 13, 2003. If you begin operations after the effective date of the rule through one year after the effective date of this rule August 16, 2002, you will have until one year from the effective date of this rule to prepare and implement your Plan. In other words, if the rule becomes effective on January 1, and you begin operations on January 2, you must prepare and implement your Plan by January 1 of the following year. If you begin operations on June 30, you still have until January 1 of the following year to prepare and implement your plan. If you begin operations on December 31, you still have until January 1 (the next day) of the following year to prepare and implement your Plan. The rationale for the time frame in the rule is that you will have had notice of the Plan preparation and implementation requirements from the publication date of the rule, a period of 30 days plus one year. In addition, you would already have had notice of the general requirement for preparation of an SPCC Plan from the current part 112 regulations. Therefore, the owner or operator of a facility planning to become operational within one year after the effective date of this rule should start working on his Plan in time to have it fully implemented within the year.

New facilities. The owner or operator of a facility that becomes operational more than one year after the effective date of this rule must prepare and implement a Plan before beginning operations.

A year phase-in period is in line with legitimate business and investment expectations. It allows a reasonable period of time for facilities to undertake necessary constructions, purchases of equipment, or to effect changes of procedures. And again, the general requirement for preparation of a Plan already exists in part 112, so new facilities should already have been aware of the need for a Plan.

Extensions. While we have extended the time period for compliance, we understand that some facilities may still need extensions of time to comply. Extensions may be necessary to secure necessary manpower or equipment, or to construct necessary structures. If you are an owner or operator and an extension is necessary, you may seek one under § 112.3(f). If no Plan amendments are necessary after you review today's rule, you must maintain your current Plan and cross-reference its elements to the redesignated requirements.

Acquired facilities. For SPCC purposes, we consider acquired facilities as facilities that are already operating rather than new facilities because these facilities must already have SPCC Plans if they exceed applicable thresholds.

Start of operations. Start of operations is when you begin to store or use oil at a facility. Often this may be a testing or calibration period prior to start up of normal operations. With the extended time line we have provided, no response team is required, but such a team may be a good engineering practice. At a minimum, you must prepare and implement a Plan as required by this rule.

Small facilities. With the extended time line we have provided, all facilities, large or small, have adequate notice and time in which to prepare and implement a Plan.

Editorial changes and clarifications. We deleted the first sentence of the proposed rule from the final rule because it is unnecessary. It is unnecessary because the obligation to have prepared a Plan is incurred under current section § 112.3(b) for the owner or operator of a facility in operation before the effective date of this rule. For the owner or operator of a facility that becomes operational on or after the effective date of this rule, revised § 112.3 provides the time period within which he must prepare and implement a Plan. The deleted sentence read, "Owners or operators of onshore facilities that become operational after September 16, 2002, and could be reasonably be expected to discharge oil as described in § 112.1(b)(1) of this part, shall prepare a facility SPCC Plan in accordance with § 112.7, and in accordance with any of the following sections that apply to the facility: §§ 112.8, 112.9, 112.10, and 112.11."

Section 112.3(b)—Time Line for Preparation and Implementation of Plans for New Facilities

Background. In 1991, we proposed that new facilities contemplating the start of operations be required to prepare and fully implement Plans before beginning operations. Our rationale was that our experience showed that many types of failures occur during or shortly following facility startup and virtually all prevention, containment, and countermeasure practices are a part of the facility design or construction.

Comments. Many commenters suggested various phase-in periods, as discussed above.

Response to comments. We believe that our original rationale is still correct. Experience with the implementation of this regulation shows that many types of failures occur during or shortly following startup and that virtually all prevention, containment, and countermeasure practices are part of the facility design or construction. Therefore, it can be beneficial to the environment and carries out the intent of the statute if a facility Plan is prepared and implemented before startup. However, to provide sufficient notice to new facilities that a Plan must be prepared and implemented before beginning operations, we have delayed implementation of this section until one year after the effective date this rule. If you begin operations within one year of the effective date of this rule, you must comply with the requirements in § 112.3(a). However, if you begin operations more than one year after the effective date of this rule, your facility would be "new" and you would have to prepare and implement an SPCC Plan before you begin operations. If you need an extension to comply, you may seek one under § 112.3(f).

Editorial changes and clarifications. The phrase "* * * could reasonably be expected to discharge oil, as described in § 112.1(b) of this part* * *" becomes "could reasonably be expected to have a discharge as described in § 112.1(b)."

Section 112.3(c)—Time Line for Preparation and Implementation of Plans for Mobile Facilities

Background. In 1991, we proposed that owners or operators of onshore and offshore mobile facilities be required to have a prepared and implemented Plan before beginning operations. Since existing mobile facilities are a subset of existing facilities, we generally assume that these facilities already have a Plan in place, as the rule now requires. 40 CFR 112.3(c). Both new and existing mobile facilities would therefore have to comply with the rule requiring a fully prepared and implemented Plan before beginning operations.

Comments. In general. One commenter believed that requiring Plans

for mobile facilities is unworkable because their physical surroundings are subject to change. Another commenter supported our proposal to allow general Plans for mobile facilities.

Multi-well drilling programs. One commenter asked if Plan updates would be required in a field where a multi-well drilling program is underway. The commenter suggested that updates should be required only after the drilling program is complete.

Response to comments. In general. We agree that the physical surroundings of mobile facilities are subject to change. However, we disagree that changing physical surroundings should exempt mobile facilities from the rule. Mobile facilities may have "general" Plans and need not prepare a new Plan each time the facility is moved to a new site. When a mobile facility is moved, it must be located and installed using the spill prevention practices outlined in the Plan for the facility.

Mobile facilities currently in operation are assumed to have implemented Plans already, because they are currently legally required to do so. Both new and existing mobile facilities must have Plans prepared and fully implemented before operations may begin. If after your review of today's rule, you decide that no amendment to your Plan is necessary, except for cross-referencing, you may continue to operate under your existing Plan, but you must promptly cross-reference the provisions in the Plan to the new format. Extension requests under § 112.3(f) are also available for mobile facilities under the proper conditions.

Multi-well drilling programs. It is not necessary to amend the Plan every time you drill a well in a field containing multiple wells. A general Plan will suffice.

Editorial changes and clarifications. We deleted the phrase "using good engineering practice," in the third sentence of the paragraph because good engineering practice is required of all Plans. See the introduction to § 112.7. Therefore, the phrase was unnecessary.

Section 112.3(d)—Certification by Professional Engineers

Background. The current rule only requires that the Professional Engineer (PE), having examined the facility and being familiar with the provisions of part 112, attest by means of his certification that the Plan has been prepared in accordance with good engineering practices. In 1991, we proposed to add specificity to the meaning of the certification requirements for a PE. We proposed that the PE attest that he is familiar with the requirements of part 112, that he has visited the facility, that the Plan has been prepared in accordance with good engineering practice and the requirements of part 112, that required testing has been completed, and that the Plan is adequate for the facility.

Comments. Certification requirement. Most commenters supported a certification requirement for PEs. Some opposed it on grounds that if all the components of the Plan were specified by rule, then certification is unnecessary. One U.S. territory, U.S. Samoa, noted that it doesn't register PEs, arguably making compliance with the rule difficult for owners or operators of facilities in Samoa.

Other commenters thought a PE certification requirement was unnecessarily burdensome and costly for small facilities, but did not provide cost estimates. One commenter asserted that PE certification should not be required for small facilities, due mainly to the prohibitive cost. The commenter also maintained that most small facilities have tanks that are required by State or local law to have the Underwriters Laboratory Seal of Approval and to have submitted a detailed plan for review and approval to the fire marshal prior to installation.

Certification by other environmental professionals. Several commenters suggested that certification could be effected by another environmental professional, rather than a PE, or by another environmental professional with PE oversight.

Good engineering practice. One commenter noted that EPA specified in the 1991 preamble that the application of good engineering practice will require that appropriate provisions of applicable codes, standards, and regulations be incorporated into the SPCC Plan for a particular facility. 56 FR 54617–18. The commenter added, however, that we do not define "good engineering practice" for this program, and urged EPA to specify in more detail as to its understanding of the term.

Testing. Some commenters wrote that it would be better for the PE to enumerate all the inspections and tests that have been completed, plus those that should be completed before the facility commences operations and those that should be undertaken periodically after it commences operations. A few commenters objected to the proposed requirement that the PE attest that required testing has been completed, suggesting instead that the operator is responsible for completion of testing. Another commenter suggested that the PE be allowed to attest to the presence of those written procedures which require testing.

Non-technical changes. Most supported the idea that non-technical changes to a Plan (for example, the emergency contact list, phone numbers, or names) need not have PE certification.

Time limit for PE certification. One commenter suggested a time limit of three years or less on PE certification, suggesting that the PE should be required to reinspect the premises periodically, preferably annually, to ascertain that the Plan continues to be implemented.

PE costs. Some commenters argued that requiring an independent or outside PE for Plan certification would be extremely expensive for facilities located in remote areas. These commenters were principally concerned that we did not fully account for the cost to a facility owner or operator for a PE to visit each facility before certifying a Plan. Requiring the use of an independent or outside PE could be burdensome to facility owners or operators.

Response to Comments. Certification requirement. PE certification of all facilities, both large and small, is necessary because a discharge as described in § 112.1(b) from any size facility may be harmful, and PE review and certification of a Plan may help prevent that discharge. We disagree that PE certification is prohibitively costly for small facilities. A Plan certified by a PE may well save the owner or operator money due to improved facility operations and decreased likelihood of discharge, thus averting potentially costly cleanups. Because a Plan for a smaller facility is likely to be less complicated than a Plan for a larger facility, PE certification costs should likewise be lower for a smaller facility. In our Information Collection Request, estimated total costs for a new facility to prepare and begin implementation of a Plan, including PE certification costs, are $2,201 for a small facility, $2,164 for a medium facility, and $2,540 for a large facility. This cost is incurred only in the year that the facility first becomes subject to the rule. This one-time cost incurred by a small facility is less than 1.5 percent of the average annual revenue for small facilities in all industry categories. The cost for the PE certification alone would represent even less than that. As shown in Chapter 5 of the Economic Analysis for this rulemaking, the average annual revenue for the smallest regulated facilities (under the current rule) ranges from $150,000 to $6,833,000, depending on the industry category. For example,

farms with annual revenue between $100,000 and $249,999 have an average annual revenue per farm of $161,430, and $2,201 (the one-time cost to prepare and implement a Plan) represents only 1.36 percent of that annual revenue. Of course, under the revised rule many of these small facilities will not be regulated by the SPCC program at all.

A PE's certification of a Plan means that the PE is certifying that the facility's equipment, design, construction, and maintenance procedures used to implement the Plan are in accordance with good engineering practices. And this is important because good engineering practices are likely to prevent discharges. PE certification, to be effective for SPCC purposes, must be completed in accordance with the law of the State in which the PE is working. For example, some States require a PE to apply his seal to effectuate a certification. Others do not.

We also disagree that small facilities need not have PE certification for SPCC Plans when the tanks are certified by the Underwriters Laboratory. A Plan consists of more than a certified tank. It contains provisions for secondary containment, integrity testing, and other measures to prevent discharges. Those provisions require PE certification to ensure that they meet the requirements of the rule and that the Plan is effective to prevent discharges.

Finally, by modifying the applicability provision in § 112.1(d)(2), we are today exempting many small facilities from the requirement to prepare and implement a Plan at all, thus saving all prospective PE costs.

In response to the commenter from Samoa, who noted that territory does not register PEs, the rule would allow an SPCC facility there to hire a PE licensed in some other State or U.S. territory.

Certification by other environmental professionals. Certification by a PE, rather than by another environmental professional is necessary to ensure the application of good engineering judgment. A PE must obtain a Bachelor of Engineering degree from an accredited engineering program, pass two comprehensive national examinations, and demonstrate an acceptable level (usually four additional years) of engineering experience. A licensed engineer is also required to practice engineering solely within his areas of competence and to protect the public health, safety, and welfare. All licensed PEs, no matter who their employer, are required by State laws and codes of ethics to discharge their engineering responsibilities accurately and honestly. Furthermore, State governments have and do exercise the authority to discipline licensed PEs who fail to comply with State laws and requirements. Other environmental professionals may not have similar expertise nor be held to similar standards as the licensed PE.

It is not always necessary for a PE to visit the facility. Therefore, we have revised § 112.3(d) to a allow site visit by either the PE or his agent. Often it will be sufficient if the PE reviews the work of other engineering professionals who have visited the facility. Someone would have to visit the facility, but not necessarily the PE. Nevertheless, in all cases the PE must ensure that his certification represents an exercise of good engineering judgment. If that requires a personal site visit, the PE must visit the facility himself before certifying the Plan.

Good engineering practice. As we noted in the 1991 preamble (at 56 FR 54617–18), good engineering practice "will require that appropriate provisions of applicable codes, standards, and regulations be incorporated into the SPCC Plan for a particular facility." We agree with the commenter that the rule needs more specificity in this regard. Therefore, we have amended § 112.3(d)(1)(iii) to specifically include consideration of applicable industry standards as an element of the PE's attestation that the Plan has been prepared in accordance with good engineering practice. We reiterate today, as we did in 1991, that consideration of applicable industry standards is an essential element of good engineering practice. Industry standards include industry regulations, standards, codes, specifications, recommendations, recommended practices, publications, bulletins, and other materials. (See § 112.7(a)(1) and (j).) The owner or operator must specifically document any industry standard used in a Plan to comply with this section. The documentation should include the name of the industry standard, and the year or edition of that standard. However, as discussed above, we have chosen not to incorporate specific industry standards into the rule.

Testing. The proposed rule would have required the PE to certify that required testing was completed. We have been persuaded by comments that the requirement should be that procedures for inspections and tests have been established, not necessarily completed, because the PE is not normally present at time of completion. Nor do we believe it is necessary to impose a requirement that the PE oversee all testing because the PE only shares responsibility with the owner or operator for establishing procedures, not for their implementation, which is the sole responsibility of the owner or operator. However, the PE may include in the Plan a schedule for testing, with specific time frames for the completion of that testing. See also the discussion in today's preamble (at section IV.D.3) on "Completion of Testing."

Non-technical changes. PE certification is not required for items that do not require engineering judgment, such as telephone numbers; names on lists; some, but not all, product changes (see the response to comments of § 112.5(a)); ownership changes; or, any other changes not requiring engineering judgment.

Time limit for PE certification. We disagree that there should be a time limit on PE certification because the rule ensures that the PE reviews the Plan at appropriate times. Thus, current PE certifications remain valid. But new certifications after the effective date of this rule must include the required attestations. If you are an owner or operator you must review your Plan at least every five years (under revisions made in today's rule), and amend it if new technology is warranted. Also, you must amend your Plan to conform with any applicable rule requirements, or at any time you make any change in facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in § 112.1(b). All material amendments require PE certification. Therefore, because a Plan will likely require one or more amendments requiring PE review and certification, a time limit on PE certifications is unnecessary. *See* § 112.5(c).

Other PE issues. As to other PE issues, as noted above (see section IV.D.2 of this preamble), the PE need not be independent of the facility. Nor is there a requirement that he not have a financial interest in it. We believe the professional integrity of a PE and the professional oversight of boards licensing PEs are sufficient to prevent any abuses.

It is not necessary that the PE be licensed in the same State as the facility because the SPCC program is national in scope and therefore State expertise is unnecessary. While States may prescribe more stringent requirements than EPA, a PE may familiarize himself with any particular requirements a State may impose and address them in the Plan. *See* § 112.7(j). Furthermore, violations of PE ethics may be handled by the licensing board of the PE's state no matter where the work is done.

EPA maintains that a site visit is necessary, but the visit may be by either the PE or his agent, so long as a visit by

an agent is consistent with good engineering practice. A visit by the PE's agent can generally be sufficient given that the PE will oversee and be responsible for his agent's work.

PE costs. We note that we did not propose a requirement for an independent PE, but requested comments on it. In the final rule, we require either the PE or the PE's agent to visit and examine the facility before the PE certifies the Plan. An agent might include an engineering technician, technologist, graduate engineer, or other qualified person to prepare preliminary reports, studies, and evaluations after visiting the site. The PE, after reviewing the agent's work, could then legitimately certify the Plan. Also, in the final rule, we allow the PE to be an employee of the facility as well as registered in a different State than the facility is located, in order to approve a Plan. The rationale is that SPCC work is national in scope and therefore State expertise is unnecessary.

Editorial changes and clarifications. "Registered Professional Engineer" becomes "licensed Professional Engineer." The first sentence of the paragraph was proposed as, "No SPCC Plan shall be effective to satisfy the requirements of this part unless it has been reviewed by a Registered Professional Engineer." We revised it to read, "A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part." This revision is due to the fact that PEs are licensed by States.

Section 112.3(e)—Location and Availability of Plan

Background. In 1991, we proposed that the Plan be available at the facility if the facility is normally manned at least four hours a day, in lieu of the current requirement that the Plan be available if the facility is manned eight hours a day. If the facility is not attended at least four hours a day, the Plan would have to be available at the nearest field office.

The rationale for the change is that some facilities interpreted the eight hour requirement not to apply to a facility that is only operating seven and one-half hours per day, with a half an hour deducted for lunch. The availability of a Plan can be extremely useful in preventing and mitigating discharges, therefore it must be available most of the time at attended facilities.

Comments. Editorial changes and clarifications. Several commenters questioned the meaning of "normal working hours," asking whose hours that meant, those of EPA or those of the facility. Several commenters questioned the meaning of "nearest field office."

Plan availability. Several commenters favored the proposal. One commenter suggested that we amend the rule to provide that the Plan be available "without advance notice," so that it would be fully implemented at all times, not just when an inspection is impending. One commenter thought that the Plan should always be located at the facility, whether manned or not, perhaps protected by a laminated cover, and at "appropriate control centers."

State and local agencies. Another commenter suggested that the Plan be filed with the local fire department and LEPC (Local Emergency Planning Committee) to facilitate public review. One State suggested there be a Federal requirement that the Plan also be filed with the State.

Response to comments. Nearest field office, normal working hours. The term "nearest field office" in paragraph (e)(1) means the office with operational responsibility for the facility, or the emergency response center for the facility, because those locations ensure accessibility for personnel who need to respond in case of a discharge. The term "normal working hours" in paragraph (e)(2) refers to the working hours of the facility or the field office, not EPA.

Plan availability. Today we have finalized the 1991 proposal that the Plan must be available at the facility if it is normally attended at least four hours per day, or at the nearest field office if it is not so attended. A Plan must always be available without advance notice, because an inspection might not be scheduled. You are not required to locate a Plan at an unattended facility because of the difficulty that might ensue when emergency personnel try to find the Plan. However, you may keep a Plan at an unattended facility. If you do not locate the Plan at the facility, you must locate it at the nearest field office.

State and local agencies. You are not required to file or locate a Plan with a State Emergency Response Commission or Local Emergency Planning Committee or other State or local agency because the distribution would unjustifiably increase the information collection burden of the rule, and not all committees or agencies may want copies of SPCC Plans. Should a State wish to require filing of a Federal SPCC Plan with a State or local committee or agency, it may do so. No Federal requirement is necessary.

Editorial changes and clarifications. In paragraph (e)(2), we deleted the term "or authorized representative" after "Regional Administrator," because the Regional Administrator may delegate his duties. Therefore, the term is unnecessary.

Section 112.3(f)—Extension of Time

Background. In 1991, we proposed to allow only new facilities to apply for extensions of time to comply with the requirements of part 112. The current rule allows any facility to apply for an extension, including existing fixed and mobile facilities. The rationale for limiting extension requests to new facilities was that existing fixed and mobile facilities have had since 1974 to comply with the rule.

Comments. Automatic extensions. Several commenters suggested that we automatically grant extension requests if we are to require a Plan to be in effect prior to commencement of operations.

Existing Plan requirements. Another commenter criticized the proposed requirement to submit the existing Plan with each extension request, because EPA's review of the Plan cannot practically be an element of the extension granting process. Another commenter suggested that the language in paragraph (f)(3) would be better if it said that the existing Plan's provisions remain in effect until they are superseded by changes proposed by the facility, because these words better reflect the intention of the rule.

Amendments. Several commenters urged EPA to allow extensions for preparation and implementation of Plan amendments.

Response to comments. Automatic extensions. Automatic extension requests are not justifiable because we have extended the time within which most facilities have to prepare and implement Plans. *See* § 112.3(a), (b), and (c). Also, under the revised rule, you may request an extension for the preparation and implementation of any Plan, or amendment to any Plan. *See* § 112.3(f).

Existing Plan requirements. We have broadened the scope of extension requests to any facility that can justify the request, because for every type of facility there may be cases in which an extension can be justified. Existing fixed and mobile facilities may experience delays in construction or equipment delivery or may lack qualified personnel, and these circumstances may be beyond the control of, and without the fault of, the owner or operator. We also agree with the commenter that the submission of the entire Plan as a matter of course is unnecessary to evaluate each extension request. Therefore, we have amended the rule to provide that the Regional Administrator may request your Plan if he deems it appropriate. But we do not believe that he will

always do so. It may be necessary under some circumstances. The Regional Administrator also retains discretion to request the Plan after on-site review, or after certain discharges. *See* § 112.4(a)(9) and (d). We disagree with the commenter's proposed rewrite of the owner or operator's obligations while the request is pending because the better policy is to require compliance with the rest of the rule that is not affected by the extension request, rather than saying that the existing Plan continues in effect.

Amendments. We have also added a provision for an extension of time to prepare and implement an amendment to the Plan, as well as an entire Plan. We believe that there may be cases in which an extension can be justified for a Plan amendment because the same extenuating circumstances may apply.

Editorial changes and clarifications. In paragraph (f)(3), "letter of request" becomes "written extension request." In the last sentence of that paragraph, "with respect to" becomes "related to."

Section 112.4(a)—Reporting Certain Discharges to EPA

Background. In 1991, we proposed to require more information than is currently required in the rule for reporting certain discharges. If your facility discharged more than 1,000 gallons in a discharge as described in § 112.1(b), or discharged oil in quantities that may be harmful in more than two discharges as described in § 112.1(b) within any consecutive twelve month period, you would have been required to submit certain information to the Regional Administrator.

In 1993, we proposed a modification to § 112.4(d)(1) which would allow the Regional Administrator to require the submission of the listed information in § 112.4(a)(1) at any time, whether or not there had been a discharge as described in § 112.1(b).

In 1997, we proposed a reduction of the amount of information currently required by § 112.4(a). We proposed to eliminate the following information, unless the Regional Administrator specifically requested it: (1) The date and year of initial facility operation; (2) maximum storage or handling capacity of the facility and normal daily throughput; and, (3) a complete copy of the SPCC Plan with any amendments.

Comments. In general. Most commenters favored the 1997 proposal. Several commenters opposed the proposal.

Information submission at any time. One commenter argued that the 1993 proposal allowing EPA to require submission of the information required in § 112.4(a)(1) and to require Plan amendments at any time is vague and does not provide adequate notice to the regulated community.

Submission of entire Plan. One commenter thought that meaningful review of the information submitted was impossible without the entire Plan. Two commenters believed that EPA would always request the information it proposed to eliminate.

Discharge threshold. Other commenters proposed a higher threshold for having to report a discharge than is currently required by § 112.4(a). Those thresholds ranged from 25–55 gallons. One commenter suggested that we relax the reporting requirement for very minor releases of petroleum products. Another suggested that if the discharge causes a sheen that dissipates within 24 hours, there should be no obligation to report.

Maps, flow diagrams, and charts. Several commenters suggested that we eliminate the requirement to submit maps, flow diagrams, and charts because those documents "add nothing useful to the inquiry."

Off-site category. Another commenter suggested that we create an "off-site" category of spill reports for discharges reported by a facility that are in a water body adjacent to the reporter's facility, or for discharges that originate off-site, but migrate to the facility.

Calculation of time for discharge reports required by § 112.4(a). Several commenters suggested that we calculate the time for the submission of discharge reports required by § 112.4(a) on a "block" basis, rather than a "rolling" basis.

Response to Comments

Information submission at any time. We agree with the commenter that the 1993 proposal to give the Regional Administrator authority to require submission of the requested information in this section at any time is vague, and have therefore withdrawn that part of the proposal. We will only require such information after the discharges specified in this section.

Submission of entire Plan. CWA section 311(m) provides EPA with the authority to require an owner or operator of a facility subject to section 311 to make reports and provide information to carry out the objectives of section 311; and CWA section 308(a) provides us with authority to require the owner or operator of any "point source" to make such reports as the Administrator may reasonably require. Therefore, we disagree that submission of the entire Plan is always necessary when reporting discharges under § 112.4(a). We believe the information now required to be submitted is adequate to assess the cause of discharge and the ability of the facility to prevent future discharges. If the RA believes that the entire Plan has utility, he can request it. However, we disagree that RAs will always require submission of the Plan, or other information not required, as a matter of course. RAs may use their administrative discretion not to require the submission of Plan information or other additional information.

Discharge threshold. 42 gallons. We agree that a higher threshold of reporting discharges is justifiable because we believe that only larger discharges should trigger an EPA obligation to review a facility's prevention efforts. We also agree that a higher threshold should trigger a facility's obligation to submit information and possibly have to take further prevention measures. Therefore, we have changed the threshold for reporting after two discharges as described in § 112.1(b). Under the revised rule, if you are the owner or operator of a facility subject to this part, you must only submit the required information when in any twelve month period there have been two discharges as described in § 112.1(b), in each of which more than 42 U.S. gallons, or one barrel, has been discharged. We adopted the 42 gallon threshold on a commenter's suggestion. We believe that a 42 gallon threshold is the appropriate one to trigger a facility's information and possibly to have to take further prevention measures. When multiple discharges occur at a facility subject to the SPCC program, such as a generating station, they often involve the discharge of very small amounts of oil, and these discharges tend to come randomly from a lube pipe, an oil level sight glass crack, or some other apparatus, and do not normally indicate a recurring problem with the container. Having two or more of these small discharges does not indicate that the facility's SPCC Plan requires revision. The other reporting threshold of 1,000 gallons in any a single discharge as described in § 112.1(b) remains the same.

We disagree that a sheen caused by a discharge as described in § 112.1(b) over the threshold amount that disappears within 24 hours should not require submission of information. The discharge itself may indicate a serious problem at the facility which needs to be corrected. The discharge report may give us the information necessary to require specific correction measures.

"Sheen" rule. The duty imposed by the CWA to report to the National Response Center all discharges that may be harmful, further described by 40 CFR 110.3, is unchanged. Those discharges include discharges that violate applicable water quality standards; or, 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.

Maps, flow diagrams, and charts. In response to comments which questioned the usefulness of such information, we have modified the provision regarding maps, flow diagrams, topographical maps (now required by paragraph (a)(6) of the current rule) to clarify that only the information necessary to adequately describe the facility and discharge, such as maps, flow diagrams, or topographical maps is necessary—not necessarily all of the information listed in the paragraph. To effect this change, we added the words "as necessary" after "topographical maps." "As necessary" means as determined by the owner or operator, subject to the obligations of this rule, unless the RA requests more information. There might be circumstances in which the owner or operator would submit only a brief description of the facility or a map, for example, because flow diagrams and topographical maps were unnecessary to describe the discharge, and would not help the RA to determine whether any amendment to the Plan was necessary to prevent future discharges as described in § 112.1(b).

Off-site category. There is no necessity for an "off-site" category of discharges as described in § 112.1(b) because only a discharge as described in § 112.1(b) that originates in a facility subject to this part counts for purposes of § 112.4(a).

Calculation of time for discharge reports required by § 112.4(a). We believe a "rolling" basis is the appropriate method to calculate a discharge as described in § 112.1(b) for purposes of the rule because discharges as described in § 112.1(b) that are closer in time are more likely to be related in cause. Discharges that are more proximate in time may indicate a problem that needs to be remedied. A "rolling basis" means that each discharge as described in § 112.1(b) triggers the start of a new twelve month period. For example, if discharge #1 occurred on January 1, and if discharge #2 occurred on June 2, discharge #2 would trigger the regulatory submission and would start a new twelve month period. If discharge #3 occurred on the following February 3, it would again trigger a submission, because discharge #3 would be within 12 months of discharge #2. While the "rolling basis" would trigger more regulatory submissions than the "block basis," we believe that it would enhance environmental protection because it would call potential problems to the attention of the Regional Administrator sooner, and allow them to be remedied sooner by a Plan amendment where necessary.

"Block" basis. The other approach would be to use a "block" period. Under this type of calculation, each third discharge as described in § 112.1(b) would not trigger a submission if it occurred within 12 months of discharge #2, but it would start the beginning of a new 12 month period. For example, if discharge #1 occurred on January 1, and discharge #2 on June 2, discharge #2 would trigger a submission. Discharge #3 on the following February 3 would not trigger a submission, but would start a new 12 month period. The principal justification for block reporting is also that discharges more closely related in time are more likely to be related. Our concern with this method is that if the February 3 discharge (i.e., discharge #3) is within twelve months of discharge #2, this situation could indicate that there is a problem that has not been remedied, so the February 3 discharge should trigger a reporting submission.

Maximum storage or handling capacity. In 1997, we proposed deletion of current paragraph (5) (renumbered as paragraph (4) in today's final rule), concerning the maximum storage or handling capacity of the facility and normal daily throughput. We have reconsidered this proposal and decided to withdraw it because the referenced information is necessary information. We have therefore retained the language in the rule. Storage capacity and normal daily throughput are important indicators of the impact of a potential discharge as described in § 112.1(b).

Additional information. If the Regional Administrator requires other information, for example, concerning the spill pathway, or any response measures taken, this request is authorized under renumbered § 112.4(a)(9), current § 112.4(a)(11).

Adjoining shorelines, natural resources, affected natural resources. Discharges into navigable waters are not the only discharges reportable for purposes of this section. We note that any discharge as described in § 112.1(b) is also within the scope of this section's reportable discharges.

Editorial changes and clarifications. If a particular information request is inapplicable, you may omit it, but must explain why it is inapplicable. Several plural nouns like "names" and "causes" become singular. Wherever the phrase "and/or" appears, we have revised the phrase to read "and." In 1997's proposed § 112.4(a)(6), redesignated as § 112.4(a)(7), "spill" becomes "discharge as described in § 112.1(b)." In 1997's proposed § 112.4(a)(8), redesignated as § 112.4(a)(9), "spill event" becomes "discharge."

Section 112.4(b)—Applicability of § 112.4

Background. Under current § 112.4(b), the § 112.4 requirements for spill reporting do not apply until the expiration of the time permitted for the preparation and implementation of a Plan pursuant to § 112.3(a), (b), (c), and (f). In 1991, we proposed that § 112.4 would not apply until the expiration of the time permitted for the preparation and implementation of a Plan under § 112.3(f) only. Section 112.3(f) is the time period in which you are permitted to prepare and implement a Plan under an extension request.

We proposed to delete the references to § 112.3(a), (b) and (c) because the current time periods allowed in these paragraphs for the preparation and implementation of the Plan (before commencement of operation for new facilities or mobile facilities, or after the effective date of the rule for other existing facilities) were proposed for deletion. Because future facilities would generally have a Plan prepared and implemented before beginning operations, there was no longer a need to temporarily relieve facilities of spill reporting obligations under § 112.4(a), unless the Regional Administrator granted an extension under § 112.3(f) to prepare and implement a Plan. We received no comments on this proposal.

In today's rule, however, we have revised § 112.3 to extend the time lines for certain facilities to prepare and implement Plans. To accord with this change, we are maintaining the approach under current § 112.4(b) to provide that the § 112.4 spill reporting requirements will not apply until the expiration of the time permitted for the initial preparation and implementation of a Plan under § 112.3(a), (b), (c), and (f). Today, we have also revised § 112.3(a) to provide an extended time line for preparing a Plan amendment and § 112.3(f) to provide for an extension request for an amendment to a Plan. Therefore, we have also revised § 112.4(b) to provide that the obligation to submit information as required by

§ 112.4(a) does not arise until the expiration of the time permitted for the initial preparation and implementation of the Plan under § 112.3, but not for any amendments to the Plan. We did not previously propose to relieve facilities of § 112.4 reporting requirements during Plan amendments or extensions for Plan amendments. An amendment may or may not be directly related to the cause of the discharge as described in § 112.1(b), and therefore may have little relevance to the duty to submit discharge reports to EPA.

Section 112.4(c)—Supplying Discharge Information to the States

Background. In 1991, we proposed that you must provide the same discharge information that you submit to the Regional Administrator under § 112.4(a) to the State agency in charge of oil pollution control activities. The current rules require that you provide that information to the State agency in charge of water pollution control activities.

Comments. Legal authority. One commenter suggested that we have no legal authority for the proposal. Another commenter asserted that EPA could only implement State agency recommendations if those recommendations fell within the scope of the SPCC rule.

In general. Several commenters suggested the proposal was redundant and unnecessary, because only EPA regulates the SPCC program, not the States.

State agency review. One commenter, a State, favored the proposal and noted that more than one State agency has statutory jurisdiction over oil pollution control in that State. That State and another suggested that all relevant State agencies receive the information. One commenter suggested that EPA should identify the appropriate State agency to which notice is due. One commenter thought the proposed change was misleading. Another commenter, a State, suggested that EPA provide the States money to review the submitted discharge information.

Response to comments. Legal authority. We have ample legal authority to finalize this rule. A similar rule has been in effect since 1974. Section 311(j)(1) of the CWA authorizes the Federal government (and EPA through delegation) to establish ''procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil. * * *'' Section 112.4(c) of this rule is a procedure to help prevent discharges that fall within the scope of that statutory provision. It enables States to learn of discharges reported to EPA and to make recommendations as to further procedures, methods, equipment, and other requirements that might prevent such discharges at the reporting facility.

We can only implement State agency suggestions that are within the scope of our authority under section 311 of the CWA.

In general. The commenter is correct that the SPCC program is a Federal program, but we believe that in working with the States, we can improve the Federal program through coordination with State oil pollution prevention programs. Therefore, we believe that the information provided to States is neither redundant nor unnecessary. Nor is the section misleading; it clearly states the obligation of the owner or operator.

State agency review. We modified the 1991 proposal on the commenters' suggestion to include notice to any appropriate State agency in charge of oil pollution control activities, since there may be more than one such agency in some States and all may have need for the information. We do not list such agencies in the rule, as a commenter suggested, because the names and jurisdiction of the State agencies are subject to change. It is the reporter's obligation to learn which State agencies receive the discharge reports. Most States publish documents on an ongoing basis, similar to the **Federal Register**, which publicize relevant regulatory information.

We do not provide State agencies funds to review these discharge reports due to budgetary constraints. While we assume that many States review these reports carefully, we cannot require them to do so. Thus, this action is not an unfunded mandate from the Federal government to the States. But if States do review the reports, they do so at their own expense.

Editorial changes and clarifications. In the last sentence of the paragraph, ''discharges of oil'' becomes ''discharges.''

Section 112.4(d)—Amendment of Plans Required by the Regional Administrator

Background. In 1991, we proposed that after review of materials under 112.4(a), the Regional Administrator (RA) might require amendment of the SPCC Plan. We also proposed that the RA might require Plan amendment after reviewing contingency plan materials submitted for approval. See proposed § 112.7(d), 1991.

In 1993, we proposed that the RA would also have authority to require Plan amendment after on-site review of the Plan. In addition, we proposed a clause empowering the RA to approve the Plan or require amendment.

We also proposed in 1993 allowing the RA to require submission of the information listed in § 112.4(a) at any time. The rationale to get this information was to prevent discharges from happening, in addition to seeking to correct the conditions that may have caused the discharge. See the background and response to comments under § 112.4(a) for a discussion of this proposal.

Comments. Regional Administrator approval of Plans. Several commenters criticized the idea of RA approval of the Plan on the theory that it is an unwarranted intrusion into the manner in which operators do business. Another urged an appeal process if EPA approval of Plans is required.

Plan information and amendments. One commenter argued that allowing EPA to require submission of the information required in § 112.4(a) at any time and to require Plan amendments at any time is vague and does not provide adequate notice to the regulated community. Several commenters were concerned that EPA would inconsistently require overly stringent measures in some Plans or might require amendments unrelated to discharge potential or which were financially unreasonable. Two commenters urged a time limit on EPA decision making following submission of required information. Another commenter was concerned that no provision required PE certification of amendments required by EPA.

Response to comments. Regional Administrator approval of Plans. We have deleted the provision that would have allowed RA approval of Plans. We have decided not to create a new class of SPCC Plans which require EPA approval, either Plans submitted following certain discharges as required by § 112.4(a) or Plans with contingency plans, because we do not believe such approval is necessary in order to ensure effective Plans.

Plan information and amendments. We agree that allowing EPA to require submission of the information required in § 112.4(a) at any time, and thereafter to require Plan amendments, is vague, and therefore we have withdrawn that part of the proposal. Furthermore, it is unnecessary because sections 308 and 311(m) of the CWA already provides us with adequate authority to request necessary Plan information.

While the RA will not have authority under this section to approve Plans, he has authority to require Plan amendment. We will strive to be as timely as possible in reviewing the

information when submitted, and making decisions on any required amendments. A time limit on the RA's decision making authority would be unnecessary because a facility may continue to operate under its existing Plan while the RA's decision is pending. While we will consider cost in our decision making, amendments may be required on a case-specific basis to help prevent discharges. Any technical amendment required would require PE certification. *See* § 112.5(c) .

Editorial changes and clarifications. We have deleted reference to the RA's approval of the submitted Plan in proposed paragraph (d)(2), because the RA will not have authority to approve a Plan. He does, however, have authority to require Plan amendment under today's revision of § 112.4(d).

Section 112.4(e)—Notification and Implementation of Required Amendments

Background. In 1991, we reproposed the current notification provision concerning required Plan amendments, and the time lines for implementation of those amendments.

Comments. Who receives notice. One commenter wanted EPA to notify railroads directly, instead of their registered agents, because of the time lag that might occur between the time the agent received notice and the owner or operator of the facility received notice. Another commenter urged that we also provide notice to the facility operator, the facility improvement owner, and the facility landowner. His rationale for such expanded notice was that a major problem may be addressed by the operator or EPA, without the knowledge and/or consent of the facility improvements owner and the facility landowner.

Appeals procedure. One commenter suggested that we include a reference to the appeal procedure for amendments in this section.

Response to comments. Who receives notice. In reply to the railroad commenter, the rule requires notice only to the owner or operator of the facility, and the registered agent, if any and if known. Notice from EPA to the facility improvements owner and landowner is unnecessary because these matters can and should be handled between the facility owner or operator and the owner or operator of the improvements or the landowner.

Appeals procedure. We have not included a reference to the appeals procedures for required amendments in this section because the appeals procedures follow immediately in the next paragraph, making such reference redundant.

Editorial changes and clarifications. We have changed the proposed requirement to mail a copy of the notice to the registered agent of a corporation to a requirement that such notice be effected only if the registered agent is known to EPA. The notification requirement for registered agents now tracks the notification requirement for registered agents in § 112.1(f). Because we have withdrawn the proposed requirement that a corporation submit that agent's name or address in the submission of information required by § 112.4(a), such agent may not be known to EPA. In the last sentence of the final rule, "amendment of the Plan" becomes "amended Plan."

Section 112.4(f)—Appeals of Required Amendments

Background. In 1991, we reproposed the current appeals procedures for required Plan amendments. We received no substantive comments. Therefore, we have promulgated the procedures as proposed.

Editorial changes and clarifications. We deleted language concerning the "designee" of the EPA Administrator because it is unnecessary. Current delegations allow the Administrator to delegate this function.

Section 112.5(a)—Plan Amendment by an Owner or Operator

Background. In 1991, we proposed to require that an owner or operator amend the Plan before making any change in facility design, construction, operation, or maintenance materially affecting the facility's potential for the discharge of oil into the waters of the United States unless the RA granted an extension. We also listed some examples of facility changes which would require Plan amendment, noting that these examples were not an exclusive list.

Comments. When amendment is necessary. Several commenters favored the proposal. Others provided differing standards for amending Plans. A number of commenters suggested that no amendments should be necessary when a facility change results in a decrease in the volume stored or a decrease in the potential for an oil spill. Another suggested a standard that amendments should be made "when there are indicia of problems." A commenter suggested a standard that no amendments would be required except for those changes which would cause the spill potential to exceed the Plan's capabilities because day-to-day changes do not affect the worst case spill and the Plan should not have to be amended on a day-to-day basis. One commenter suggested that small facilities with less than 5,000 gallon-capacity should be exempted from the need to amend their Plans for the listed acts. Another commenter asserted that instead of being required to amend their Plans before changes are made, operators should be encouraged to incorporate new procedures into their SPCC Plans to prevent and contain potential discharges which might result from performing needed repairs and replacements. The rationale for the suggestion was that operators will then not "save up" potential amendments due to the burden of preparing an amendment.

Material changes. Many commenters offered opinions on the examples of material changes listed in the rule for which amendments would be required. Some suggested that the rule should read that these are only examples of changes that may trigger amendment. Several commenters suggested that decommissioning a tank should not trigger an amendment because "as a tank is removed, so is the requirement for an SPCC Plan." Another commenter noted that changing a product in a tank or cleaning a tank should not be considered commissioning or decommissioning a tank. One commenter suggested that an amendment to the Plan should be required when there is a change of product stored within the tank.

Documenting no change or certain activities. Another commenter suggested that a log book might be used instead of a Plan amendment to document "routine activities" and measures taken to maintain the spill prevention and response integrity of the facility. Several commenters suggested that an identical replacement of tanks or other equipment should not be considered a material change and therefore amendment should not be required. A utility commenter asked that facilities be allowed to accumulate minor modifications for a period of 6 months, then update the Plan.

EPA approval. Another commenter suggested that we clarify that EPA approval of an amendment made under this section is not required.

Time line for amendment implementation. Numerous commenters opposed the proposed requirement that a Plan be amended before any material changes are made. Commenters suggested various alternative amendment time lines ranging from 90 days to six months following such changes, with a cluster of commenters around the six months alternative. Others suggested that the Plan be

amended at fixed time points such as before a design is physically implemented, before startup of operations, after modifications, before new or modified equipment is in operation, or when changes are made. One commenter said that rule language should be clarified to note that the RA may specify a time period longer than six months to implement an amendment.

Response to comments. When amendment is necessary. We agree with the commenter who suggested that we maintain the current standard for amendments, i.e., when there is a change that materially affects the facility's potential to discharge oil. This position accords with our stance on when Plans should be prepared and implemented. *See* § 112.3. The other suggested standards too narrowly limit the changes which would trigger Plan amendment. We believe that an amendment is necessary when a facility change results in a decrease in the volume stored or a decrease in the potential for an oil spill because EPA needs this information to determine compliance with the rule. For example, the amount of secondary containment required depends on the storage capacity of a container. Decreases might also affect the way a facility plans emergency response measures and training procedures. A lesser capacity might require different response measures than a larger capacity. The training of employees might be affected because the operation and maintenance of the facility might be affected by a lesser storage capacity.

Likewise, a standard requiring amendment "when there are indicia of problems" is too vague and leaves problems unaddressed which may result in a discharge as described in § 112.1(b). A standard requiring an amendment only when the change would cause the spill potential to exceed the Plan's capabilities (because day-to-day changes do not affect the worst case spill) would have the effect of leaving no documentation of amendments which might affect discharges which do not reach the standard of "worst case spill." While we encourage facilities to incorporate new procedures into Plans which would help to prevent discharges, amendments are still necessary when material changes are made to document those new procedures, and thus facilitate the enforcement of the rule's requirements. We disagree that a small facility should be exempt from making amendments for material changes. Amendments may be necessary at large or small facilities alike to prevent discharges after material changes.

Material changes. A material change is one that may either increase or decrease the potential for a discharge. We agree with the commenter that the rule should be worded to indicate that the examples are for illustration only, because the items in the list may not always trigger amendments, and because the list is not exclusive. Only changes which materially affect operations trigger the amendment requirement. Ordinary maintenance or non-material changes which do not affect the potential for the discharge of oil do not.

We disagree that decommissioning of a container that results in permanent closure of that container is not a material amendment. Decommissioning a container could materially decrease the potential for a discharge and require Plan amendment, unless such decommissioning brings the facility below the regulatory threshold, making the preparation and implementation of a Plan no longer a requirement. We also believe that the oversight of a Professional Engineer is necessary to ensure that the container is in fact properly closed.

We agree that replacement of tanks, containers, or equipment may not be a material change if the replacements are identical in quality, capacity, and number. However, a replacement of one tank with more than one identical tank resulting in greater storage capacity is a material change because the storage capacity of the facility, and its consequent discharge potential, have increased.

Changes of product. We have added to the list of examples, on a commenter's suggestion, "changes of product." We added "changes of product" because such change may materially affect facility operations and therefore be a material change. An example of a change of product that would be a material change would be a change from storage of asphalt to storage of gasoline. Storage of gasoline instead of asphalt presents an increased fire and explosion hazard. A switch from storage of gasoline to storage of asphalt might result in increased stress on the container leading to its failure. Changes of product involving different grades of gasoline might not be a material change and thus not require amendment of the Plan if the differing grades of gasoline do not substantially change the conditions of storage and potential for discharge.

A change in service may also be a material change if it affects the potential for a discharge. A "change in service" is a change from previous operating conditions involving different properties of the stored product such as specific gravity or corrosivity and/or different service conditions of temperature and/or pressure. Therefore, we have amended the rule to add "or service" after the phrase "changes of product."

Documenting no change or certain activities. We agree that a log book may be used to document non-material, routine activities. However, this is not an appropriate substitute for amendment when you make material changes at the facility.

EPA approval. We agree with the commenter's suggestion that EPA approval of an amendment is not required. However, if the RA is not satisfied that your amendment satisfies the requirements of these rules, he may require further amendment of your Plan.

Time line for amendment implementation. We agree with commenters that we should not require Plan amendment before material changes are made. Therefore, we have revised the proposed rule to provide a maximum of six months for Plan amendment, and a maximum of six more months for amendment implementation. This is the current standard. We note that § 112.3(f) allows the RA to authorize an extension of time to prepare and implement an amendment under certain circumstances.

Editorial changes and clarifications. The phrase in the first sentence which read, "potential to discharge oil as described in § 112.1(b) of this part," becomes "potential for a discharge as described in § 112.1(b). "Tanks" becomes "containers." "Commission or decommission" becomes "commissioning or decommissioning."

Section 112.5(b)—Periodic Review of Plans

Background. In 1991, we reproposed the current rule, which requires that the owner or operator review the Plan at least every three years, and amend it if more effective control and prevention technology would significantly reduce the likelihood of a spill, and if the technology had been field-proven at the time of the review.

In 1997, we withdrew the 1991 proposal, and instead proposed a five-year review time frame, with the same technological conditions. In 1997, we also proposed that the owner or operator certify that he had performed the review.

Comments. Five-year review. Most commenters favored the change from three-to five-year review. Some

commenters noted that a five-year review period would make it easier to coordinate reviews of related plans, such as facility response plans required by part 112. A few opposed it, preferring the current three-year review period. They believed that five-year review might lead to reduced maintenance and consequent environmental harm, especially in the absence of any requirements for a facility to ensure that personnel are familiar with planning goals and proposed response actions, including personnel who are rotated. One commenter suggested that the longevity of a tank warranty should be the determining factor in the length of review time. Another suggested that there should be no particular time period prescribed because the requirement for an amendment whenever a material change is made is sufficient.

Completion of review. Commenters split almost evenly on the proposed requirement for certification of completion of the review. Opponents of the certification proposal believed generally that it is unnecessary paperwork that will not benefit the environment. One commenter suggested that instead of documenting completion of review, a facility might instead date the Plan to show review and date each amendment. One commenter thought that the certifications should have to be forwarded to the Regional Administrator. Others asked whether the certification could be documented in a log book, instead of in the Plan. Another commenter asked at what management level certification should be required. One commenter believed that Plans amended due to five-year reviews should not require owner or operator certification because any amendments to the Plan have to be reviewed and certified by a PE. Another commenter noted that no specific language was provided for the certification. One commenter urged that the PE should be allowed to document that no change is necessary after reviewing planned changes, or that further study is required, or that an amendment is necessary.

Response to comments. Five-year review. We agree that a five-year review period will make coordination of review of related plans, such as facility response plans required by part 112, easier. We disagree that a five-year review period will lead to reduced maintenance or increased environmental harm. Amendment of a Plan will still be necessary when a material change is made affecting the facility's potential to discharge oil, perhaps after certain discharges as required by the RA under § 112.4(a), and perhaps after on-site review of a Plan (*see* § 112.4(d)). Plus the Plan must be implemented at all times. These opportunities ensure that Plans will be current. We also disagree that the length of the tank warranty should be the determining factor for a technological review. Technology changes enough within a five-year period to warrant required review within such time period whether or not other changes occur. Amendments other than the five-year review amendments may not be based on the need to learn of improved technology. Those amendments might result from deficiencies in the Plan, on the need to make repairs, or to remedy the cause of a discharge.

Calculation of time between reviews. The change in the rule from three-year to five-year reviews requires some explanation as to when a review must be conducted. For example, a facility became subject to the rule on January 1, 1990. The first three-year review should have been conducted by January 1, 1993, the second by January 1, 1996, and the third by January 1, 1999. The next review must be conducted by January 1, 2004, due to the rule change. In other words, an existing facility must complete the review within 5 years of the date the last review must have been completed. A facility becoming operable on or after the effective date of the rule will begin a five-year cycle at the date it becomes subject to part 112.

Completion of review. We disagree that documentation of completion of review has no environmental benefit. Its benefit lies in the fact that it shows that someone reviewed the Plan to determine if better technology would benefit the facility and the Plan is current. Documentation of completion of review is necessary whether or not any amendments are necessary in order to clearly show that the review was done. Mere dating of the Plan or of an amendment does not show that you performed the required review. Documentation of completion of review is a function of the owner or operator, whereas certification of any resulting technical amendment is a function of the PE. We disagree that documentation of completion should be forwarded to the Regional Administrator because it would increase the information collection burden without an environmental benefit. It is sufficient that the review be done. When the Regional Administrator wishes to verify completion of review, he may do so during an on-site inspection.

How to document completion of review. You must add documentation of completion of review either at the beginning or the end of the Plan, or maintain such documentation in a log book appended to the Plan or other appendix to the Plan. You may document completion in one of two ways. If amendment of the Plan is necessary, then you must state as much, and that review is complete. This statement is necessary because Plan amendments may result either from five-year review or from material changes at the facility affecting its potential for discharge, or from on-site review of the Plan. There is no way to know which circumstance causes the amendment without some explanation. If no amendments are necessary, you must document completion of review by merely signing a statement that you have completed the review and no amendments are necessary. You may use the words suggested in the rule to document completion, or make any similar statement to the same effect.

Who documents review. The owner or operator of the facility, or a person at a management level with sufficient authority to commit the necessary resources, must document completion of review.

Time line for amendment implementation. We agree with commenters (see comments on proposed § 112.5(a)) that the preparation and implementation of Plan amendments require more time than proposed. The same rationale applies to the preparation and implementation of amendments required due to five-year reviews. Therefore, we will require adherence to the time lines laid down in § 112.5(b) for amendments. Currently, § 112.5(b) requires that Plan amendments be prepared within six months. It is silent as to time lines for implementation. Therefore, we have revised the rule to clarify that amendments must be implemented as soon as possible, but within the next six months. This is the current standard for implementation of certain other amendments. *See,* for example, §§ 112.3(a) and 112.4(e). We note that § 112.3(f) allows you to request an extension of time to prepare and implement an amendment.

Editorial changes and clarifications. We have changed the word "certification" to a requirement to document completion of the review to avoid the legal effect a certification may have. The intent of the certification proposal was merely to show that an owner or operator performed a review of the Plan every five years. 62 FR 63814, December 2, 1997. A false documentation of completion of review of the Plan is a deficiency in the Plan and may be cited as a violation of these

rules. "Spill event," in the second sentence, becomes "discharge as described in § 112.1(b).

Section 112.5(c)—PE Certification of Technical Amendments

Background. In 1991, we proposed that all amendments to the Plan must be certified by a PE with the exception of changes to the contact list. The current rule requires certification of all amendments.

Comments. A few commenters suggested that the value of PE certification for amendments does not justify the cost. Another commenter questioned when recertification of the entire Plan was required, rather than just the amendment in question. Several commenters suggested that the recertification requirement be limited to those changes that materially affect the facility's potential to discharge oil.

Response to comments. It is the responsibility of the owner or operator to document completion of review, but completion of review and Plan amendment are two different processes. PE certification is not necessary unless the Plan is amended.

We believe that PE certification is necessary for any technical amendment that requires the application of good engineering practice. We believe that the value of such certification justifies the cost, in that good engineering practice is essential to help prevent discharges. Therefore, we have amended the rule to require PE certification for technical changes only. Non-technical changes not requiring the exercise of good engineering practice do not require PE certification. Such non-technical changes include but are not limited to such items as: changes to the contact list; more stringent requirements for stormwater discharges to comply with NPDES rules; phone numbers; product changes if the new product is compatible with conditions in the existing tank and secondary containment; and, any other changes which do not materially affect the facility's potential to discharge oil. If the owner or operator is not sure whether the change is technical or non-technical, he should have it certified.

Former Section 112.7(a)(1)—Certain pre-1974 Discharges

Background. In 1991, we proposed to delete § 112.7(a), which required a description of certain discharges to navigable waters or adjoining shorelines which occurred prior to the effective date of the rule in 1974, because that information was no longer relevant. 56 FR 54620. We received several comments supporting the proposed deletion of this provision, and have deleted it.

Section 112.7 Introduction and (a)(1)—General Eequirements

Background. In 1991, we reproposed the introduction to § 112.7 to clarify that the rule requires mandatory action, and that it is not just a guideline. In 1997, we reproposed a definition of SPCC Plan that included some substantive requirements. As noted above (*see* the "SPCC Plan" definition in § 112.2), those substantive requirements have been transferred from the definition of "SPCC Plan" in § 112.2 to this section.

Section 112.7(a)(1) requires a discussion of the facility's conformance with the listed requirements in the rule.

Comments. For a discussion of the "should to shall to must" comments and response to those comments, see the discussion above under that topic in section IV.C of this preamble.

Cross-referencing. Several commenters criticized the requirement for sequential cross-referencing set forth in the 1997 proposed definition of "SPCC Plan," alleging that it is confusing and provides no benefit. Another commenter asked how detailed the cross-referencing must be.

Written Plans. Another commenter proposed that a "written" Plan might also include texts, graphs, charts, maps, photos, and tables, on whatever media, including floppy disk, CD, hard drive, and tape storage that allows the document to be easily accessed, comprehended, distributed, viewed, updated, and printed.

Response to comments. Cross-referencing. We agree that the term "sequential" cross-referencing may be confusing, and have therefore deleted it in favor of a requirement to provide cross-referencing. We disagree that cross-referencing provides no benefit. With the wide variation now allowed in differing formats, we need cross-referencing so that an inspector can tell whether the Plan meets Federal requirements, and whether it is complete. In addition, in order for an owner or operator to do his own check to ensure that his facility meets all SPCC requirements, he must go through the exercise of comparing his Plan to each SPCC requirement. Cross-referencing in the context of the rule means indicating the relationship of a requirement in the new format to an SPCC requirement. The cross-referencing must identify the Federal section and paragraph for each section of the new format it fulfills, for example, § 112.8(c)(3). Note the cross-referencing table we have provided for your convenience in section II.A of this preamble.

Written Plans. We agree that a "written" Plan might also include texts, graphs, charts, maps, photos, and tables, on whatever media, including floppy disk, CD, hard drive, and tape storage, that allows the document to be easily accessed, comprehended, distributed, viewed, updated, and printed. Whatever medium you use, however, must be readily accessible to response personnel in an emergency. If it is produced in a medium that is not readily accessible in an emergency, it must be also available in a medium that is. For example, a Plan might be electronically produced, but computers fail and may not be operable in an emergency. For an electronic Plan or Plan produced in some other medium, therefore, a backup copy must be readily available on paper. At least one version of the Plan should be written in English so that it will be readily understood by an EPA inspector.

Editorial changes and clarifications. We have transferred all of the proposed substantive requirements in the 1997 proposed definition of "SPCC Plan" to the introduction of this section. We did this because we agree with commenters (*see* the comments on the definition of "SPCC Plan" in § 112.2) that definitions should not contain substantive requirements.

We have revised the introduction to § 112.7 to facilitate use of the active voice and to clearly note that the owner or operator, except as specifically noted, is responsible for implementing the rule.

We also deleted language requiring a "carefully thought-out" SPCC Plan. Such language is unnecessary because the Plan must be prepared in accordance with good engineering practices. Another editorial revision in the introduction is the change from "level with authority" in the last sentence of proposed § 112.7(a) to "level of authority." A third revision is a change from "format" to "sequence." We have transferred the part of the sentence proposed in 1991 dealing with the sequence of the Plan in § 112.7(a)(1) to the introduction of § 112.7.

For consistency with response plan language in § 112.20(h), the language in the introduction referring to alternative SPCC formats has been revised to read "equivalent Plan acceptable to the Regional Administrator." The response plan language in § 112.20(h) on "equivalent response plans" has also been revised to include the "acceptable to the Regional Administrator" language included in the introduction to § 112.7. For a discussion of possible SPCC formats, see the discussion under the definition of "SPCC Plan," above.

We deleted the term "sequentially cross-referenced" because we agree that it may be misunderstood, and instead use the term "cross-referencing" in the revised rule. As noted above, cross-referencing means identifying the requirement in the new format to the section and paragraph of the SPCC requirement. We have also substituted the word "part" for "section" where "cross-referencing" and meeting "equivalent requirements" are mentioned. We make this change because the rule requires compliance with any applicable provision in the part, not merely § 112.7. We also clarify that the discussion of your facility's conformance with the requirements listed (see § 112.7(a)(1)) means the requirements listed in part 112, not merely the requirements listed in § 112.7.

We also note that if the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. The discussion must include a schedule for the installation and start-up of these items.

Section 112.7(a)(2)—Deviations from Plan Requirements

Background. In 1991, we proposed to allow deviations from the requirements listed in § 112.7(c) and in §§ 112.8, 112.9, 112.10, and 112.11, as long as the owner or operator explained the reason for nonconformance and provided equivalent environmental protection by another means. The proposal was intended to implement the requirement for "good engineering practice" which is a cornerstone of the rule, and to provide flexibility in meeting the rule's requirements. We clearly noted in the rule that the Regional Administrator would have the authority to overrule any deviation.

In 1993, we reproposed the section, eliminating language referring to the Regional Administrator's (RA's) authority to overrule deviations. Instead, we proposed that whenever you proposed a deviation, you would have to submit the entire Plan to the RA with a letter explaining how your Plan contained equivalent environmental protection measures in lieu of those explicitly required in the rule. The RA would have authority under the 1993 proposal to require amendment of the Plan if he determined that the measures described in the deviation did not provide equivalent protection.

Comments. Some commenters supported the 1991 proposal. But others had concerns.

Applicability—1991. Some commenters suggested that the Agency should add language to the rule making clear that a facility may deviate from the express requirements of the rule and may substitute alternatives based on good engineering practice. The commenters added that we should make clear that the equivalency provision in § 112.7(a)(2) does not require mathematical equivalency of every requirement, but merely the achievement of substantially the same level of overall protection from the risk of discharge at the facility as the specific requirement seeks to achieve. Another commenter was concerned that proving the equivalence of measures to the satisfaction of Regional officials may be difficult. One commenter urged us to expressly state that PEs may substitute alternatives based on good engineering practice.

RA oversight—1991. One commenter opposed the provision allowing the RA to overrule waivers/equivalent measures. As noted above, we withdrew the proposal to allow the RA to explicitly overrule waivers. Instead we substituted a proposed procedure whereby the RA could require you to amend your Plan. One commenter feared that PEs would be reluctant to certify alternate technologies due to the threat of potential liability.

Deviation submission. One commenter opposed the proposed requirement to submit a Plan deviation and urged its deletion to make it consistent with the rest of the SPCC rule. The commenter argued that the deviation and Plan have already been certified by a PE, and there is no reason for EPA to be asked to second guess that certification in every case. The commenter also asserted that it is unduly burdensome to require regulated facilities to prepare a justification and submit a Plan to EPA for every waiver of the technical requirements. Another commenter questioned why the entire Plan should be submitted to the RA for review. The commenter suggested that only the portion or portions of the Plan that do not conform to the standard requirements should be submitted, adding that this step would help EPA to minimize the resources needed to review such waivers. One commenter suggested that the choice of preventive systems in the design and implementation of spill prevention measures should be left to the facility owner or operator. The commenter opposed giving the RA authority to require equivalent protection because he questioned how the RA will determine if the deviation will cause harm to the environment, and therefore lack equivalency. If such a provision is included, the commenter asked for an appeals process similar to the one suggested in § 112.20(c).

RA oversight—1993. One commenter favored the 1993 proposal. Opposing commenters believed that submission of deviations to the RA is unnecessary because PE certification ensures the application of good engineering practice.

Secondary containment. Several commenters suggested that we explicitly say that equivalent protection should be defined to allow a compacted earthen floor and compacted earthen dike to provide secondary containment. The rationale for the comment was that other methods of secondary containment may be prohibitively expensive and unnecessary to protect against spills in primarily rural areas. One commenter suggested that we should clarify that the language of § 112.7(c) applies only to oil storage areas.

Response to comments. Applicability. We generally agree with the commenter that an owner or operator should have flexibility to substitute alternate measures providing equivalent environmental protection in place of express requirements. Therefore, we have expanded the proposal to allow deviations from the requirements in § 112.7(g), (h)(2) and (3), or (i), as well as subparts B, and C, except for the listed secondary containment provisions in § 112.7 and subparts B and C. The proposed rule already included possible deviations for any of the requirements listed in §§ 112.7(c), 112.8, 112.9, 112.10, and 112.11. We have expanded this possibility of deviation to include the new subparts we have added for various classes of oils. We take this step because we believe that the application of good engineering practice requires the flexibility to use alternative measures when such measures offer equivalent environmental protection. This provision may be especially important in differentiating between requirements for facilities storing, processing, or otherwise using various types of oil.

A deviation may be used whenever an owner or operator can explain his reasons for nonconformance, and provide equivalent environmental protection. Possible rationales for a deviation include when the owner or operator can show that the particular requirement is inappropriate for the facility because of good engineering practice considerations or other reasons, and that he can achieve equivalent

environmental protection in an alternate manner. For example, a requirement that may be essential for a facility storing gasoline may be inappropriate for a facility storing asphalt; or, the owner or operator may be able to implement equivalent environmental protection through an alternate technology. An owner or operator may consider cost as one of the factors in deciding whether to deviate from a particular requirement, but the alternate provided must achieve environmental protection equivalent to the required measure. The owner or operator must ensure that the design of any alternate device used as a deviation is adequate for the facility, and that the alternate device is adequately maintained. In all cases, the owner or operator must explain in the Plan his reason for nonconformance. We wish to be clear that we do not intend this deviation provision to be used as a means to avoid compliance with the rule or simply as an excuse for not meeting requirements the owner or operator believes are too costly. The alternate measure chosen must represent good engineering practice and must achieve environmental protection equivalent to the rule requirement. Technical deviations, like other substantive technical portions of the Plan requiring the application of engineering judgment, are subject to PE certification.

In the preamble to the 1991 proposal (at 56 FR 54614), we noted that "* * * aboveground storage tanks without secondary containment pose a particularly significant threat to the environment. The Phase One modifications would retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific oil spill contingency plans in lieu of the prevention systems." In keeping with this position, we have deleted the proposed deviation in § 112.7(a)(2) for the secondary containment requirements in §§ 112.7(c) and (h)(1); and for proposed §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c); as well as for the new sections which are the counterparts of the proposed sections, *i.e.*, §§ 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), because a more appropriate deviation provision already exists in § 112.7(d). Section § 112.7(d) contains the measures which a facility owner or operator must undertake when the secondary containment required by § 112.7(c) or (h)(1), or the secondary containment provisions in the rule found at §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), are not practicable. Those measures are expressly tailored to address the lack of secondary containment at a facility. They include requirements to: explain why secondary containment is not practicable; conduct periodic integrity testing of bulk storage containers; conduct periodic integrity and leak testing of valves and piping; provide in the Plan a contingency plan following the provisions of 40 CFR part 109; and, provide a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful. Therefore, when an owner or operator seeks to deviate from secondary containment requirements, § 112.7(d) will be the applicable "deviation" provision, not § 112.7(a)(2).

Deviation submission. We agree with the commenter that submission of a deviation to the Regional Administrator is not necessary and have deleted the proposed requirement. We take this step because we believe that the requirement for good engineering practice and current inspection and reporting procedures (for example, § 112.4(a)), followed by the possibility of required amendments, are adequate to review Plans and to detect the flaws in them. Upon submission of required information, or upon on-site review of a Plan, if the RA decides that any portion of a Plan is inadequate, he may require an amendment. See § 112.4(d). If you disagree with his determination regarding an amendment, you may appeal. See § 112.4(e).

RA oversight. Once an RA becomes aware of a facility's SPCC Plan as a result of an on-site inspection or the submission of required information, he is to follow the principles of good engineering practice and not overrule a deviation unless it is clear that such deviation fails to afford equivalent environmental protection. This does not mean that the deviation must achieve "mathematical equivalency," as one commenter pointed out. But it does mean equivalent protection of the environment. We encourage innovative techniques, but such techniques must also protect the environment. We also believe that in general PEs will seek to protect themselves from liability by only certifying measures that do provide equivalent environmental protection. But the RA must still retain the authority to require amendments for deviations, as he can with other parts of the Plan certified by a PE.

Not covered under the deviation rule. Deviations under § 112.7(a)(2) are not allowed for the general and specific secondary containment provisions listed above because § 112.7(d) contains the necessary requirements when you find that secondary containment is not practicable. We have amended both this paragraph and § 112.7(d) to clarify this. Instead, the contingency planning and other requirements in § 112.7(d) apply. Deviations are also not available for the general recordkeeping and training provisions in § 112.7, as these requirements are meant to apply to all facilities, or for the provisions of § 112.7(f) and (j). We already provide flexibility in the manner of recordkeeping by allowing the use of ordinary and customary business records. Training and a discussion of compliance with more stringent State rules are essential for all facilities. Therefore, we do not allow deviations for these measures.

Secondary containment. Regarding the secondary containment requirements, the requirement in § 112.7(c) applies not only to oil storage areas, but also to operational areas of the facility where a discharge may occur. Section 112.7(c) may apply to any area of the facility where a discharge is possible. Other secondary containment provisions in this part have more particular applicability, *e.g.*, §§ 112.7(h)(1), 112.8(c)(2), 112.8(c)(11), 112.9(c)(2),112.10(c), and their counterparts in subpart C. We decline to specify that a compacted earthen floor and compacted earthen dike will always satisfy the secondary containment requirements. Those methods may, however, be acceptable if there is no potential for oil to migrate through the compacted earthen floor or dike through groundwater to cause a discharge as described in § 112.1(b).

Editorial changes and clarifications. "Equivalent protection" becomes "equivalent environmental protection" throughout the paragraph.

Section 112.7(a)(3)—Facility Characteristics That Must be Described in the Plan

Background. In 1991, we proposed a new section that would require you to describe the essential characteristics of your facility in the Plan. Those characteristics are discussed below. In the description, you would also be required to provide a facility diagram that included the location and contents of all tanks, regardless of whether the tanks are subject to all the provisions of 40 CFR part 280 or a State program approved under 40 CFR part 281, or otherwise subject to part 112. The rationale for the diagram was that it would assist in response actions.

Responders would have a means to know where all containers are, to help ensure their safety in conducting a response action and aid in the protection of life and property.

Comments. General description of characteristics. Two commenters asked that the requirements proposed for Plan characteristics be listed on a facility basis rather than a tank basis because otherwise the proposal would be too resource intensive. The commenters did not provide cost estimates.

Facility diagram. Two commenters supported the proposal. Opposing commenters asserted that the diagram would be too costly and add little to the Plan. One commenter said that the requirement was redundant because many States require the same thing. Two commenters opposed marking the contents of the tanks because those contents may change frequently, requiring Plan amendment each time. One commenter suggested that instead the facility maintain a separate list of tank contents when changes occur frequently over a short span of time to eliminate the need to constantly amend the diagram. Other commenters requested a *de minimis* exemption for small containers for the diagram, suggesting levels of 660 gallons or less. Some of these commenters suggested that the diagram be discretionary for storage volumes of less than 10–15,000 gallons. Other commenters asked whether exempt materials would have to be marked as to content, for example, products which are not oil. Some believed that the inclusion of otherwise exempt containers in the diagram was unreasonable. One commenter suggested the diagram should include transfer stations and connecting pipes. Another commenter asked for clarification that underground tanks, whether subject to SPCC or not, need to be included in the diagram.

Unit-by-unit storage capacity. Several commenters asked for clarification of the meaning of the term "unit-by-unit storage capacity." Many commenters asked for specification of a minimum size, and some suggested sizes, ranging from 660 gallons to 10,000 gallons.

Type and quantity of oil stored. We received one comment on this item. The commenter opposed the information requirement because "the way a tank is used changes often and the adequacy of response to an accidental discharge does not depend on the type of oil stored."

Estimates of quantity of oils potentially discharged. The few comments we received opposed this information requirement. One commenter argued that the item requests a "prediction" of future events. Another asserted that it would not be possible to give estimates of oil potentially discharged from flowlines or gathering systems. One commenter argued that mobile facilities should be exempt from this requirement because the exact site information changes with the movement of equipment.

Possible spill pathways. Two commenters wrote that the proposed requirement "could be an infinite number and serves no useful purpose." One commenter asked that the requirement be replaced by a requirement to describe the most likely spill pathways to navigable water.

Spill prevention measures (including loading areas and transfers). One commenter suggested that the beginning of the paragraph be revised to read, "Secondary containment" instead of "Spill prevention measures. . . ." See also the discussion on loading areas under § 112.7(h).

Spill controls and secondary containment. One commenter thought that this paragraph should refer to "other drainage control features and the equipment they protect."

Spill countermeasures. One commenter suggested that this paragraph be revised to read, "Prevention, control, or countermeasure features, other than secondary containment and drainage control, and the equipment which they protect." Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible. One commenter suggested that the contingency planning requirements in this paragraph, as well as in § 112.7(b) and (d)(1), seem unnecessarily complex because the same basic information seems to be required in several different places in the proposed regulation. The commenter went on to suggest that EPA consolidate these requirements. Another commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Disposal of recovered materials. Two commenters supported the proposal in general, but one suggested that it is not feasible nor useful to discuss particular alternatives. One of the favorable commenters suggested that we should encourage recycling of spilled oil rather than mere disposal. Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible.

Some opposing commenters believed that the proposal would preclude bioremediation. Others believed that it was too costly. One commenter suggested that the "costs associated with off-site disposal of oil-saturated soil from a typical secondary containment facility after a contained spill event will cost an operator as much as $4,700, calculated at the cost of $90 per ton of removed soil for transportation and disposal fees and the associated leachate and waste analysis but *excluding* the internal costs associated with the actual excavation work." Other commenters believed that we have no authority to ask the question because the subject matter is regulated either by State law or another Federal program, such as the solid waste program. One commenter asked for an exemption for mobile facilities from this requirement.

Contact list. Several commenters favored the proposal. One commenter suggested that the list name the cleanup contractor with whom the facility has a relationship, not merely the name of any cleanup contractor.

One commenter favored the inclusion of local emergency planning contacts in the required information. Another opposed it as duplicative of information in the HAZWOPER Plan. A commenter requested an exemption for mobile facilities. Another commenter believed we lack authority to request the information. One commenter suggested that the list be restricted to Federal or State agencies that must be notified in case of the accidental discharge of oil. Another commenter argued that mobile drilling and workover rigs either on or off shore should be exempt from this requirement because supplying site specific spill and clean-up information for a mobile source that will move from one site to another is not feasible. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Downstream water suppliers. Several commenters suggested that the proposed requirement to include information on downstream water suppliers who must be contacted in case of a discharge to navigable waters should be limited to those "who might reasonably be affected by a discharge." Others asked that the downstream distance be specified. They added that private wells should be excluded from the notice. Several

commenters asked how they might identify such suppliers. Yet others believed that such notification was the responsibility of local emergency response agencies.

Response to comments. General description of characteristics. The following characteristics must be described on a per container basis: the storage capacity of the container, type of oil in each container, and secondary containment for each container. The other characteristics may be described on a facility basis. We disagree that these requirements are too resource intensive. The major new requirement in § 112.7(a)(3) is the facility diagram. Based on site inspections and professional judgment, we estimate unit costs for compliance with this section to be $33 for a small facility, $39 for a medium facility, and $5 for a large facility. Large facilities are assumed to already have a diagram that may be attached to the SPCC Plan. The other items mentioned in § 112.7(a)(3)—storage capacity of each container, prevention measures, discharge controls, countermeasures, disposal methods, and the contact list—are already required under the current rule or required by good engineering practice. As described in the Information Collection Request for this rule, the cost of Plan preparation includes these items, e.g., field investigations to understand the facility design and to predict flow paths and potential harm, regulatory review, and spill prevention and control practices.

Providing information on a container-specific basis helps the facility to prioritize inspections and maintenance of containers based on characteristics such as age, capacity, or location. It also helps inspectors to prioritize inspections of higher-risk containers at a facility. Container-specific information helps an inspector verify the capacity calculation to determine whether a Plan is needed; and, helps to formulate contingency planning if such planning is necessary.

Facility diagram. The facility diagram is important because it is used for effective prevention, planning, management (for example, inspections), and response considerations and we therefore believe that it must be part of the Plan. The diagram will help the facility and emergency response personnel to plan for emergencies. For example, the identification of the type of oil in each container may help such personnel determine the risks when conducting a response action. Some oils present a higher risk of fire and explosion than other less flammable oils.

Inspectors and personnel new to the facility need to know the location of all containers subject to the rule. The facility diagram may also help first responders to determine the pathway of the flow of discharged oil. If responders know possible pathways, they may be able to take measures to control the flow of oil. Such control may avert damage to sensitive environmental areas; may protect drinking water sources; and may help responders to prevent discharges to other conduits leading to a treatment facility or navigable waters. Diagrams may assist Federal, State, or facility personnel to avoid certain hazards and to respond differently to others.

The facility diagram is necessary for all facilities, large or small, because the rationale is the same for both. While some States may require a diagram, others do not. SPCC is a Federal program specifying minimum requirements, which the States may supplement with their own more stringent requirements. We note that State plans may be used as SPCC Plans if they meet all Federal requirements, thus avoiding any duplication of effort if the State facility diagram meets the requirements of the Federal one.

Facility diagram—container contents. The facility diagram must include all fixed (*i.e.,* not mobile or portable) containers which store 55 gallons or more of oil and must include information marking the contents of those containers. If you store mobile containers in a certain area, you must mark that area on the diagram. You may mark the contents of each container either on the diagram of the facility, or on a separate sheet or log if those contents change on a frequent basis. Marking containers makes for more effective prevention, planning, management, and response. For example, a responder may take one type of emergency measure for one type of oil, and another measure for another type. As noted above, oils differ in their risk of fire and explosion. Gasoline is highly flammable and volatile. It presents the risk of fire and inhalation of vapors when discharged. On the other hand, motor oil is not highly flammable, and there is no inhalation of vapors hazard associated with its discharge.

In an emergency, the responder may not have container content information unless it is clearly marked on a diagram, log, or sheet. For emergency response purposes, we also encourage, but do not require you to mark on the facility diagram containers that store CWA hazardous substances and to label the contents of those containers. When the contents of an oil container change, this may or may not be a material change. See the discussion on § 112.5(a).

Facility diagram—De minimis containers. We have established a de minimis container size of less than 55 gallons. You do not have to include containers less than 55 gallons on the facility diagram.

Facility diagram—Transfer stations, connecting pipes, and USTs. We agree that all facility transfer stations and connecting pipes that handle oil must be included in the diagram, and have amended the rule to that effect. This inclusion will help facilitate response by informing responders of the location of this equipment. The location of all containers and connecting pipes that store oil (other than de minimis containers) must be marked, including USTs and other containers not subject to SPCC rules which are present at SPCC facilities. Again, this is necessary to facilitate response by informing responders of the location of these containers.

Unit-by-unit storage capacity. For clarity, we have changed the term in § 112.7(a)(3)(i), "unit-by-unit" storage capacity, to "type of oil in each container and its storage capacity." As noted earlier, this requirement applies only to containers of 55 gallons or greater.

Type and quantity of oil stored. We have eliminated proposed § 112.7(a)(3)(ii) because it repeats information requested in revised § 112.7(a)(3)(i). We ask for information concerning storage capacity and type of oil stored in each container in that paragraph.

Estimates of quantity of oils potentially discharged. We have eliminated proposed § 112.7(a)(3)(iii) because it repeats information sought in § 112.7(b) regarding "a prediction of the direction, rate of flow, and total quantity of oil which could be discharged* * *." We will address the substantive comments under the discussion of that paragraph.

Possible spill pathways. We have eliminated proposed § 112.7(a)(3)(iv) because the proposal repeats information sought in § 112.7(b) regarding "a prediction of the direction, rate of flow, and total quantity of oil which could be discharged.* * *" Again, we will address the substantive comments under the discussion of that paragraph.

Spill prevention measures. We have revised this paragraph to read "discharge prevention measures." We disagree with the commenter that the paragraph should be labeled "secondary containment." The term "discharge prevention measures" is better because

it encompasses both secondary containment and other discharge prevention measures.

Spill controls and secondary containment. We have revised this paragraph to refer to "discharge" controls. In response to a commenter, we have also included a reference to drainage controls in the paragraph because drainage systems or diversionary ponds might be an alternative means of secondary containment. See § 112.7(c)(1)(iii) and (v).

Spill countermeasures. We disagree that the paragraph should be revised to read, "Prevention, control, or countermeasure features, other than secondary containment and drainage control, and the equipment which they protect," because we believe that the language we proposed, as revised, better captures the information we are seeking. Our revised language refers to discovery, response, and cleanup, which are features that are absent from the commenter's suggestion, and for which a discussion in the Plan is necessary in order to be prepared for any discharges.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

We also disagree that the information required in this paragraph is redundant of information required in §§ 112.7(b) and 112.7(d)(1). Each of the sections mentioned requires discrete and different information. Section 112.7(a)(3)(iv) requires information concerning a facility's and a contractor's capabilities for discharge discovery, response, and cleanup. Section 112.7(b) requires information concerning the potential consequences of equipment failure. Section 112.7(d)(1) requires a contingency plan following the provisions of part 109, which includes coordination requirements with governmental oil spill response organizations.

We disagree that the information should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for discharge discovery, response, and cleanup.

Disposal of recovered materials. This provision applies to all facilities, including mobile facilities, because proper disposal of recovered materials helps prevent a discharge as described in § 112.1(b) by ensuring that the materials are managed in an environmentally sound manner. Proper disposal also assists response efforts. If a facility lacks adequate resources to dispose of recovered oil and oil-contaminated material during a response, it limits how much and how quickly oil and oil-contaminated material is recovered, thereby increasing the risk and damage to the environment.

We disagree that this paragraph would preclude bioremediation efforts, as some commenters suggested. Bioremediation may be a method of proper disposal. The paragraph merely requires that you discuss the methods employed to dispose of recovered materials; it does not require that materials recovered be "disposed" of in any particular manner nor is it an independent requirement to properly dispose of materials. Thus, there is no infringement on or duplication of any other State or Federal program or regulatory authority. Because it does nothing more than require that you explain the method of disposal of recovered materials, we also disagree that this provision is too costly. Also, we assume that good engineering practice will in many cases include a discussion of such disposal already. By describing those methods in the Plan, you help ensure that the facility has done the appropriate planning to be able to dispose of recovered materials, should a discharge occur. We support the recycling of spilled oil to the extent possible, rather than its disposal. For purposes of this rule, disposal of recovered materials includes recycling of those materials.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

Contact list. In response to a comment, we have amended the rule to require that the cleanup contractor listed must be the one with whom the facility has an agreement for response that ensures the availability of the necessary personnel and equipment within appropriate response times. An agreement to respond may include a contract or some less formal relationship with a cleanup contractor. No formal written agreement to respond is required by the SPCC rule, but if you do have one, you must discuss it in the Plan.

We have ample authority to ask for information concerning emergency contacts under the CWA because it is relevant to the statute's prevention, preparedness, and response purposes. Furthermore, it is an appropriate question for all facilities, including mobile facilities, because it is necessary to prepare for discharges and to aid in prompt cleanup when they occur. Having a Plan which contains a contact list of response organizations is a procedure and method to contain a discharge of oil as specified in CWA section 311(j)(1)(C). However, we have eliminated references to specific State and local agencies in the event of discharges in favor of a reference to "all appropriate State and local agencies." "Appropriate" means those State and local agencies that must be contacted due to Federal or State requirements, or pursuant to good engineering practice. You may not always be required to notify fire departments, local emergency planning committees (LEPCs), and State emergency response commissions (SERCs), nor as an engineering practice do they always need to receive direct notice from the facility in the event of a discharge as described in § 112.1(b). At times they might, but they might also receive notice from other sources, such as the National Response Center. Other State and local agencies might also need notice from you.

We have added the word "Federal" to the list of all appropriate contact agencies because there are times when you must notify EPA of certain discharges. See § 112.4(a). There might also be requirements under Federal statutes other than the CWA, for notice in such emergencies.

We disagree that either onshore or offshore mobile drilling and workover rigs should be exempted from this requirement because the information necessary to this requirement is not always site specific, and may be included in a general plan for a mobile facility.

We disagree that the information should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for response to an emergency.

Downstream water suppliers. We have deleted the reference to "downstream water suppliers" (i.e., intakes for drinking and other waters) because facilities may have no way to identify such suppliers. We agree with commenters that identifying such suppliers is more a function of State and local emergency response agencies. We note, however, that facilities that must prepare response plans under § 112.20 must discuss in those plans the vulnerability of water intakes (drinking, cooling, or other).

Editorial changes and clarifications. In the introduction to paragraph (a)(3), ''physical plant'' becomes ''physical layout.'' ''Tanks'' becomes ''containers.'' In proposed paragraph (a)(3)(vi), redesignated as paragraph (a)(3)(iii), ''spill controls'' becomes ''discharge or drainage controls.'' In proposed paragraph (a)(3)(vii), redesignated as paragraph (a)(3)(iv), ''spill countermeasures for spill discovery'' becomes ''countermeasures for discharge discovery.'' In proposed paragraph (a)(3)(ix), redesignated as paragraph (a)(3)(vi), ''discharge to navigable waters'' becomes ''discharge as described in § 112.1(b).''

Section 112.7(a)(4)—Spill Reporting Information in the Plan

Background. In 1991, we proposed that documentation in this paragraph be sufficient to enable a person reporting a spill to provide essential information to organizations on the contact list.

Comments. Several commenters had editorial comments, suggesting the rule refer to ''information'' rather than ''documentation'' on the theory that documentation refers to a past event, whereas the rule contemplates a future event. One commenter suggested that the section be qualified to indicate that a form for collecting spill report information be included in the Plan, or for ''small size facilities'' in the HAZWOPER reporting matrix. Another commenter suggested that a properly prepared SPCC Plan would assist the person reporting the spill to provide the requested information. One commenter asserted the proposed rule was duplicative of State requirements. Several commenters suggested that not all of the information will be available or applicable for a person reporting a discharge. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Response to comments. Documentation. We agree with commenters that the word ''documentation'' is inappropriate because it refers to a past event. Accordingly, as suggested by commenters, we have revised the rule to provide for ''information and procedures'' that would assist the reporting of discharges as described in § 112.1(b). ''Information'' refers to the facts which you must report, and ''procedures'' refers to the method of reporting those facts. Such procedures must address whom the person relating the information should call, in what order the caller should call potential responders and others, and any other instructions necessary to facilitate notification of a discharge as described in § 112.1(b). If properly noted, the information and procedures in the Plan should enable a person reporting a discharge to accurately describe information concerning that occurrence to the proper persons in an emergency. Any information or procedure not applicable will not have to be used. Available information on a discharge must be reported. Applicable procedures must be followed. And of course, any information that is not available cannot be reported.

State requirements. While it is possible that this information may be duplicative of State requirements, the duplication is eliminated to the extent that you use your State SPCC Plan for Federal SPCC purposes. Where there is no State requirement, there is no duplication.

Response plan exemption. We disagree that this paragraph should be placed in a response section, because most SPCC facilities are not required to have response plans, and the information is necessary to prepare for response to an emergency. However, if your facility has prepared and submitted a response plan to us under § 112.20, there is no need to document this information in your SPCC Plan, because it is already contained in the response plan. See § 112.20(h)(1)(i)-(viii). Therefore, we have amended the rule to exempt those facilities with response plans from the requirements of this paragraph.

Editorial changes and clarifications. We changed ''address'' to ''address or location'' because some facilities do not have an exact address. ''Spill'' and ''spilled'' becomes ''discharge as described in § 112.1(b)'' or ''discharged'' as appropriate in the context, ''discharge'' being a defined term. ''Spill'' or ''spilled'' are not defined terms. ''The affected medium'' becomes ''all affected media.''

Section 112.7(a)(5)—Emergency Procedures

Background. In 1991, we proposed this paragraph to ensure that portions of the Plan describing procedures to be used in emergency circumstances are organized in a manner to make them readily usable in an emergency.

Comments. One commenter suggested that this paragraph should be deleted and removed to a response plan section which he suggested, because the information called for requires response information.

Response to comments. We disagree this paragraph should be deleted because most SPCC facilities are not required to have a response plan, and the procedures to be used when a discharge occurs are necessary to prepare for an emergency. Because this information would repeat information contained in a response plan submitted under § 112.20, we have excluded from the requirements of this paragraph those facilities which have submitted response plans. *See* § 112.20(h)(3)(i)-(ix).

Section 112.7(b)—Fault Analysis

Background. In 1991, we proposed only editorial changes to this paragraph dealing with fault analysis. The proposal would require an analysis of the major types of failures possible in a facility, including a prediction of the direction, rate of flow, and total quantity of oil that could be discharged as a result of each such failure.

Comments. Applicability. One commenter wrote that the language in the first sentence of the proposed rule is less clear than current regulations. The commenter asserted that the proposed revision, perhaps inadvertently, does not specify the sections to which the certain ''situations'' apply. The commenter suggested that current language is clearer and specifically focuses limited resources on situations for which there is a reasonable potential for discharge. The commenter argued that limited resources should not be consumed in developing flow rate, direction and quantity predictions in the SPCC Plan for situations without a reasonable potential for discharge to navigable waters.

Several commenters asserted that the fault analysis required by this paragraph is ''too involved for small operators.'' They suggested that only development of responses to obvious scenarios, such as tank rupture, should be required. Commenters from the utility industry suggested that electrical equipment facilities should be exempt from the requirements in this paragraph. One commenter believed that mobile facilities should be exempt from the requirements in the paragraph because the exact site information changes with the movement of equipment.

Failure factors. One commenter suggested that the rule should also focus on small discharges, not just ''major'' discharges. Another commenter asked for clarification as to what is a ''major failure'' and to what degree of sophistication the pathway prediction must be made. Another commenter suggested that the rule should adequately describe how detailed the analysis of potential spill pathways

should be. Another suggested that it would be impossible to give estimates of oil potentially discharged from flowlines or gathering systems.

Response to comments. Applicability. We agree with the commenter that current language is clearer and will retain it. We therefore modified the first sentence contained in the proposed rule. We agree that the Plan must only discuss potential failure situations that might result in a discharge from the facility, not any failure situation. The rule requires that when experience indicates a reasonable potential for failure of equipment, the Plan must contain certain information relevant to those failures. "Experience" includes the experience of the facility and the industry in general.

We disagree that the requirement is too difficult for owners or operators of small or mobile facilities, or of flowlines or gathering lines, or of electrical equipment facilities, or other users of oil. We believe that a Professional Engineer may evaluate the potential risk of failure for the aforementioned facilities and equipment and predict with a certain degree of accuracy the result of a failure from each. We note that since we have raised the regulatory threshold, this requirement will not be applicable to many smaller facilities.

Failure factors. To comply with this section, you need only address "major equipment" failures. A major equipment failure is one which could cause a discharge as described in § 112.1(b), not a minor failure possibility. To help clarify the type of equipment failures the rule contemplates, we have added examples of other types of failures that would trigger the requirements of this paragraph. Such other equipment failures include failures of loading/unloading equipment, or of any other equipment known to be a source of a discharge. The analysis required will depend on the experience of the facility and how sophisticated the facility equipment is. If your facility has simpler equipment, you will have less to detail. If you have more sophisticated equipment, you will have to conduct a more detailed analysis. If your facility's experience or industry experience in general indicates a higher risk of failure associated with the use of that equipment, your analysis will also have to be more detailed. This rationale and analytic detail are also applicable to electrical equipment facilities and other facilities that do not store oil, but contain it for operational use. Again, the required explanation will be tailored to the type of equipment used and the experience with that equipment.

Spill pathways. The level of analysis concerning spill pathways will depend on the geographic characteristics of the facility's site and the possibility of a discharge as described in § 112.1(b) that equipment failure might cause. However, the Professional Engineer should focus on the most obvious spill pathways.

Because this information is facility specific, the owner or operator of a mobile facility will not be able to detail spill pathways in the general Plan for the facility each time the facility moves. However, the owner or operator must provide management practices in the general Plan that provide for containment of discharges in spill pathways in a variety of geographic conditions likely to be encountered. In case of a discharge at a particular facility, the owner or operator would then take appropriate action to contain or remove the discharge. For example, the Plan may provide that a rig must be positioned to minimize or prevent discharges as described in § 112.1(b); or it may provide for the use of spill pans, drip trays, excavations, or trenching to augment discharge prevention.

Editorial changes and clarifications. We made minor editorial changes in the proposal's second sentence that reflect a plain language format. We revised the phrase in the proposed second sentence of the paragraph from "each major type of failure" to "each type of major equipment failure."

Section 112.7(c)—Secondary Containment.

Background. The SPCC Task force concluded that aboveground storage tanks without secondary containment could pose a particularly significant threat to the environment. We noted in the 1991 preamble that the proposed rule modifications would "retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific contingency plans in lieu of prevention systems." 56 FR 54614.

In 1991, we proposed to modify the current standard that dikes, berms, or retaining walls must be "sufficiently impervious." We proposed that the current "sufficiently impervious" standard for secondary containment be replaced with a standard requiring that the entire containment system, including walls and floor, must be impervious to oil for 72 hours. The rationale was that a containment system that is impervious to oil for 72 hours would allow time for discovery and removal of an oil discharge in most cases.

We also noted that for some facilities such as electrical substations, compliance with this section might not be practicable. We said that since their purpose was not the storage of oil in bulk, they did not need to comply with the secondary containment requirements designed for bulk storage tanks in §§ 112.8(c) and 112.9(d), but only the secondary containment requirements in § 112.7(c), and that the § 112.7(c) requirement for secondary containment might be satisfied by various means including drainage systems, spill diversion ponds, etc. We added that the alternative requirements contained in proposed § 112.7(d) would fulfill the intent of the CWA when a facility could not provide secondary containment due to the impracticability of installation. 56 FR 54621.

Comments. Editorial changes and clarifications. Several commenters suggested that the reference to prevention of discharges to "surface waters" be changed to prevention of discharges to "navigable waters."

Contingency planning. One commenter suggested revising the rules to allow the use of the contingency plan contemplated in § 112.7(d) instead of secondary containment measures. Another commenter asserted that a contingency plan is not an acceptable substitute for secondary containment and advocated that all facilities be required to have secondary containment.

Applicability of requirement. Numerous electric utility commenters suggested that secondary containment was impractical for their facilities because it might cause a safety hazard. Instead, they argued for the use of contingency planning. One commenter asserted that secondary containment at sites used for the maintenance and operation of the air traffic control system was also impracticable because those sites are often very small, isolated, unmanned, and visited only on a quarterly basis. Another commenter asked that wastewater treatment tanks be exempted from the secondary containment requirement because their use is not to store oil, but to treat water. Other containers not used for storage, but other purposes might include stormwater surge tanks, activated sludge aeration tanks, equalization basins, dissolved and inducted air floatation tanks, oil/water separators, sludge digesters, etc. Another commenter urged that all oil-filled equipment located in a 25-year floodplain be required to have secondary containment.

One commenter asked that we clarify that the secondary containment requirement in this section does not apply to the following equipment at onshore production facilities: flowlines because of the prohibitive cost of construction for miles of lines; fired vessels because of the danger of pooling spilled oil around an ignition source; and, pressurized vessels because a leak from such vessel might be sprayed beyond the area that a reasonable dike might enclose. One commenter suggested that all in-use hydraulic equipment such as cranes, jacks, elevators, forklifts, etc., be exempted from the secondary containment requirement because it would be impractical to provide structures for such equipment. Others suggested that mobile facilities should be exempt from the secondary containment requirement because it would be infeasible to provide it. Similarly, one commenter suggested that the requirement was infeasible for production facilities due to their sometimes remote locations or difficult terrain and soil conditions. Yet another commenter wanted us to clarify that underground piping is not subject to the rule's secondary containment provisions.

One commenter asserted that mining sites should be exempted from the secondary containment requirement because the containment requirements would be "excessive" for such sites and result in "little resultant net environmental benefit." A commenter representing various small facilities asked for exemption from the requirement on the basis that the risk is lower for those facilities.

Methods of secondary containment. As to methods of secondary containment, several commenters urged that the existence of "natural" structures and/or drainage could meet this requirement. Other commenters suggested that vaulted tanks or double-walled tanks in themselves meet the secondary containment requirement. One commenter suggested that we remove sorbent materials or booms from the list of acceptable secondary containment structures because they are not a substitute for impervious dikes and impoundment floors.

72-hour impermeability standard. We received numerous comments on the proposed 72-hour impermeability standard. Several commenters favored the standard. Many were opposed. Of the opponents, some favored the current standard that the dikes, berms or retaining walls be "sufficiently impervious" to contain spilled oil. Other commenters thought that the proposed requirement to prevent escape of oil to surface waters should be replaced with a standard of preventing the escape of oil to "the environment" or to "navigable waters." Others asked for clarification of the term "impervious," asserting that it is a qualitative term that requires definition by engineering standards. One commenter requested that if an impervious containment system cannot be provided, that facilities be required to assure that conduits that may cause substantial migration of free products are appropriately monitored for discharges. Another commenter asked us to specify acceptable liner materials, in lieu of a total imperviousness requirement.

Costs. One commenter suggested that our industry cost estimate for the proposed 1991 regulations—of $441 million in the first year and $71.8 million each subsequent year—was erroneously low, but did not provide his own cost estimates. The commenter came to this conclusion by calculating compliance cost estimates for the following requirements: 72-hour impermeability for secondary containment and diked areas, and installation of containment systems at all truck loading locations. The commenter estimated the cost of the effects of two proposed items for New York oil and gas producers, not all us producers, at in excess of $78 million; he estimated the cost of the proposed 72 hour oil impermeability requirement at $48 million, and if earthen dikes and diked areas cannot meet the secondary containment standards at truck loading areas, at least $30 million.

Alternate impermeability standards. Commenters suggested a number of alternate impermeability standards. One commenter suggested a standard that the containment system be impervious to oil and water for 72 hours. Another commenter suggested that the standard apply only in environmentally sensitive areas. Some suggested that the standard should be inapplicable at facilities that are staffed around the clock, seven days a week. One commenter suggested a phase-in of the requirement. Some thought that the impermeability standard should not apply to heavier oils, particularly number 5 and 6 oils.

Alternate time frames. Others suggested differing time standards in lieu of 72 hours such as 24 hours at manned facilities, 36 hours or increased inspections, "as soon as practicable," "for the duration of the response," or no time limit at all. One commenter asked when the 72 hours begins to run, whether it begins at the time of the discovery of the discharge or the time of occurrence.

Containment or impermeability. Other commenters asserted that the rule should address containment rather than impermeability because they assert that the point of a containment structure is "to keep the discharge from reaching the waters of the United States." In the same vein, two commenters asked EPA to clarify that the leaching of small amounts of oil that does not reach the water table or surface waters meets the impermeability requirement, while a third asked that we clarify that we are concerned only with horizontal rather than vertical discharges of oil.

Sufficient freeboard. See the comments to § 112.8(c)(2) under this topic.

Response to comments. Contingency planning. A contingency plan should not be used routinely as a substitute for secondary containment because we believe it is normally environmentally better to contain oil than to clean it up after it has been discharged. Secondary containment is intended to contain discharged oil so that it does not leave the facility and contaminate the environment. The proper method of secondary containment is a matter of good engineering practice, and so we do not prescribe here any particular method. Under part 112, where secondary containment is not practicable, you may deviate from the requirement, provide a contingency plan following the provisions of 40 CFR part 109, and comply with the other requirements of § 112.7(d). For bulk storage containers, those requirements include both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping. You must also provide a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged that may be harmful.

Applicability of requirement. Secondary containment is best for most facilities storing or using oil because it is the most effective method to stop oil from migrating beyond that containment. We believe that secondary containment is preferable to a contingency plan at manned and unmanned facilities because it prevents discharges as described in § 112.1(b). At unmanned facilities, it may be even more important because of the lag in time before a discharge may be discovered. Notwithstanding what may be difficult terrain, we believe that some form of secondary containment is practicable at most facilities, including remote production facilities. In fact, it may often be more feasible in remote or rural areas because there are fewer space limitations in such areas. For example,

at some remote mobile or production facilities, owners or operators dig trenches and line them for containment or retention of drilling fluids. Technologies used at offshore facilities to catch or contain oil may also sometimes be used onshore.

While some types of secondary containment (for example, dikes or berms) may not be appropriate at certain facilities, other types (for example, diversionary systems or remote impounding) might. However, we recognize and repeat, as we noted in the 1991 preamble, that some or perhaps all types of secondary containment for certain facilities with equipment that contain oil, such as electrical equipment, may be contrary to safety factors or other good engineering practice considerations. There might be other equipment, like fired or pressurized vessels, for which safety considerations also preclude some or all types of secondary containment.

Some facilities or equipment that use but do not store oil may or may not, as a matter of good engineering practice, employ secondary containment. Such facilities might include wastewater treatment facilities, whose purpose is not to store oil, but to treat water. Other facilities that may not find the requirement practicable are those that use oil in equipment such as hydraulic equipment. Similarly, flowlines must have a program of maintenance to prevent discharges. *See* § 112.9(d)(3). The maintenance program may or may not include secondary containment. Owners or operators of underground piping must have some form of corrosion protection, but do not necessarily have to use secondary containment for that purpose.

As stated above, for a facility where secondary containment is not practicable, the owner or operator is not exempt from the requirement, but may instead provide a contingency plan and take other measures required under § 112.7(d). For most facilities, however, including small facilities, mobile facilities, production facilities, mining sites, and any other facilities that store or use oil, we believe that secondary containment is generally necessary and appropriate to prevent a discharge as described in § 112.1(b). Without secondary containment, discharges from containers would often reach navigable waters or adjoining shorelines, or affect natural resources.

Methods of secondary containment. The appropriate method of secondary containment is an engineering question. Earthen or natural structures may be acceptable if they contain and prevent discharges as described in § 112.1(b), including containment that prevents discharge of oil to groundwater that is connected to navigable water. What is practical for one facility, however, might not work for another. If secondary containment is not practicable, then the facility must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Double-walled or vaulted tanks. The term ''vaulted tank'' has been used to describe both double-walled tanks (especially those with a concrete outer shell) and tanks inside underground vaults, rooms, or crawl spaces. While double-walled or vaulted tanks are subject to secondary containment requirements, shop-fabricated double-walled aboveground storage tanks equipped with adequate technical spill and leak prevention options might provide sufficient equivalent secondary containment as that required under § 112.7(c). Such options include overfill alarms, flow shutoff or restrictor devices, and constant monitoring of product transfers. In the case of vaulted tanks, the Professional Engineer must determine whether the vault meets the requirements for secondary containment in § 112.7(c). This determination should include an evaluation of drainage systems and of sumps or pumps which could cause a discharge of oil outside the vault. Industry standards for vaulted tanks often require the vaults to be liquid tight, which if sized correctly, may meet the secondary containment requirement.

There might also be other examples of such alternative systems.

Completely buried tanks. Completely buried tanks, other than those exempted from this rule because they are subject to all technical Federal or State UST requirements, are subject to the secondary containment requirement. We realize that the concept of freeboard for precipitation is inapplicable to secondary containment for completely buried tanks. The requirement for secondary containment may be satisfied in any of the ways listed in the rule or their equivalent.

72-hour impermeability standard. We are withdrawing the proposal for the 72-hour impermeability standard and will retain the current standard that dikes, berms, or retaining walls must be sufficiently impervious to contain oil. We agree with commenters that the purpose of secondary containment is to contain oil from escaping the facility and reaching the environment. The rationale for the 72-hour standard was to allow time for the discovery and removal of an oil spill. An owner or operator of a facility should have flexibility in how he prevents a discharge as described in § 112.1(b), and any method of containment that achieves that end is sufficient. Should such containment fail, the owner or operator must immediately clean up any discharged oil.

Similarly, because the purpose of the ''sufficiently impervious'' standard is to prevent discharges as described in § 112.1(b), dikes, berms, or retaining walls must be capable of containing oil and preventing such discharges. Discharges as described in § 112.1(b) may result from direct discharges from containers, or from discharges from containers to groundwater that travel through the groundwater to navigable waters. Effective containment means that the dike, berm, or retaining wall must be capable of containing oil and sufficiently impervious to prevent discharges from the containment system until it is cleaned up. The same holds true for container floors or bottoms; they must be able to contain oil to prevent a discharge as described in § 112.1(b). However, ''effective containment'' does not mean that liners are required for secondary containment areas. Liners are an option for meeting the secondary containment requirements, but are not required by the rule.

If you are the owner or operator of a facility subject to this part, you must prepare a Plan in accordance with good engineering practice. A complete description of how secondary containment is designed, implemented, and maintained to meet the standard of sufficiently impervious is necessary. In order to document that secondary containment is sufficiently impervious and sufficiently strong to contain oil until it is cleaned up, the Plan must describe how the secondary containment is designed to meet that standard. A written description of the sufficiently impervious standard is not only necessary for design and implementation, but will aid owners or operators of facilities in determining which practices will be necessary to maintain the standard of sufficiently impervious. Control and/or removal of vegetation may be necessary to maintain the impervious integrity of the secondary containment. Repairs of excavations or other penetrations through secondary containment will need to be conducted in accordance with good engineering practices in order to maintain the standard of sufficiently impervious. The owner or operator should monitor such imperviousness for effectiveness, in order to be sure that the method chosen remains impervious to contain oil.

Costs. We note that we have withdrawn the proposed 72 hour standard, and afford various secondary containment options, including earthen dikes and diked areas, if they contain and prevent discharges as described in § 112.1(b). Therefore, there are no new costs. We disagree with the commenters who asserted that we underestimated the cost to comply with the secondary containment and truck loading and unloading area requirements. The revised rule, like the current rule, does not require a specific impermeability for dikes and does not require a specific method of secondary containment at loading and unloading areas, and this flexibility is reflected in our cost estimates. We noted in our 1991 Supplemental Cost/Benefit Analysis that secondary containment for bulk storage tanks is estimated to cost $1,000 for small facilities; $6,400 for medium facilities; and $63,000 for large facilities. Unit cost estimates were developed for a broad mix of facilities (*e.g.,* farms, bulk petroleum terminals) in each size category by experienced engineers with firsthand knowledge of the Oil Pollution Prevention Regulation and the operations of onshore SPCC-regulated facilities. Because our cost estimates must be representative of the many types of facilities that are regulated, they will underestimate the costs for some facility types and overestimate the costs for others. Facilities were assumed to construct secondary containment systems of impervious soil capable of holding 110 percent of the largest tank. In that analysis, we estimated that 78 percent and 88 percent of the regulated community were already in compliance with these requirements, respectively, and would not be affected by the proposed rule change.

Since we last performed these analyses, API has issued several industry standards, including API 653 and 2610, which address many of the provisions in the SPCC rule. As a result, the final rule relies on current industry standards and practices, where feasible. In the final rule, we withdrew the proposed 72-hour impermeability standard for secondary containment and maintained the current requirement that dikes, berms, and oil retaining walls must be sufficiently impervious to contain oil. As a result, the final rule reflects current industry standards and we assume poses no additional requirements on industry.

Sufficient freeboard. See the Response to Comments in § 112.8(c)(2) for a discussion of this topic.

Industry standards. Industry standards that may assist an owner or operator with secondary containment include: (1) NFPA 30; (2) BOCA, National Fire Prevention Code; and, (3) API Standard 2610, ''Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities.''

Editorial changes and clarifications. In the introduction to paragraph (c), ''structures or equipment to prevent discharged oil from reaching a navigable water course'' becomes ''structures or equipment to prevent a discharge as described in § 112.1(b).'' This wording change reflects the expanded scope of the CWA as reflected in § 112.1(b) and is clearer than the proposed language. In the second sentence of the paragraph, we deleted the words ''permeate, drain, infiltrate, or otherwise'' from the sentence because they were unnecessary. The word ''escape'' in that sentence is sufficient. Also in that sentence, the reference to ''escape to surface waters'' becomes ''escape from the containment system.'' This language more clearly reflects the intent of the rule that secondary containment should keep oil from escaping from the facility and reaching navigable waters or adjoining shorelines. In paragraph (c)(2)(i), ''curbing, drip pans'' becomes ''curbing or drip pans.''

In response to the commenter's question, we note that a primary containment system is the container or equipment which holds oil or in which oil is used.

Section 112.7(d)—Contingency Planning

Background. 1991 proposal. In 1991, we proposed to add several new requirements to the contingency planning requirement in § 112.7(d). First, we proposed that a facility without secondary containment be required to test a tank for integrity every five years. In contrast, our 1991 proposal for § 112.8(c)(6) provided for testing at least every 10 years for a tank with secondary containment. In addition, we proposed to require a facility without secondary containment to conduct integrity and leak testing of valves and piping at least annually. We also proposed that the contingency plan be submitted to the Regional Administrator for approval.

Instead of referring to 40 CFR part 109 for contingency plan requirements as the current rule does, the 1991 proposal added specific requirements including a description of response plans; personnel needs; methods of mechanical containment; removal of spilled oil; and, access to and availability of sorbents, booms, and other equipment. Additionally, the proposal would have required that the Plan not rely on dispersants and other chemicals for response to oil spills without approval by the Regional Administrator. The owner or operator of a facility would also have been required to provide a written commitment of manpower, equipment, and materials required to quickly control and remove any quantity of oil that may be discharged.

1993 proposal. In 1993, we modified the 1991 proposal for a facility that lacks secondary containment to require a facility response plan as described in § 112.20, instead of the specific requirements proposed in 1991. The response plan would not be submitted to the Regional Administrator for his review, unless otherwise required, but would be maintained at the facility with the SPCC Plan.

Comments. 1991 comments. Many commenters supported the 1991 proposal. Opposing commenters suggested that such planning should be discretionary because not all facilities need such planning, or that facilities be allowed to use contingency plans prepared for other purposes. Others thought the proposal was premature as we had not at the time finalized response planning requirements in § 112.20. One commenter argued that we should delete all of the contingency planning requirements in § 112.7(d) at the point when we require an owner or operator to prepare a response plan. Some said that contingency planning was not practicable because the costs are too high, but commenters did not provide cost estimates. Several commenters criticized the proposed requirement that the contingency plan be submitted to the Regional Administrator, calling it duplicative, time-consuming, and unnecessary. Two commenters suggested that the Contingency Plan prepared under RCRA rules would suffice. Representatives of small facilities asked for a small facility exemption. Others asked for clarification of what a ''written commitment'' of manpower, equipment, and materials meant. Several commenters asked if PE certification of the contingency plan was necessary. One commenter opposed any requirement to provide contingency planning for buried tanks, piping, or valves for which secondary containment cannot be provided.

Integrity and leak testing. Several commenters supported the proposed integrity and leak testing requirements. Others opposed them, some on the basis that facilities already inspect their tanks regularly. Various commenters suggested exemptions for small containers or containers that are entirely within buildings. Electrical utilities argued that the requirement was

inapplicable for them because they do not store oil and that such testing would cause disruption in electrical service. Mining interests likewise asked for an exemption on the basis that they only store small amounts of oil and the requirements would be very expensive, but did not provide specific cost estimates. Various commenters asked for clarification of the term "integrity testing," and its applicability. Others asked for clarification as to methods of testing. Some argued that testing of valves and gathering lines would be expensive and result in shut-downs of operations. None of these commenters provided specific cost estimates.

1993 proposal. One commenter argued that the response plan proposal was beyond our statutory authority. Others argued that the proposal was expensive and lacking in environmental benefit. One commenter said that the installation of structures or measures achieving equivalent protection should be sufficient to avert the need for a response plan. Another suggested that the current rule, which specifies use of a strong oil spill contingency plan following 40 CFR part 109, is adequate. One commenter asked for an exemption for facilities in areas historically not subject to natural disasters. Electrical utility commenters asked for an exemption because they argued that a response plan was unnecessary for facilities that use, but do not store, oil.

Response to comments. Planning requirements. We note that we did not finalize the 1991 or 1993 contingency planning proposals. Thus there are no new costs for such planning.

Under the current rule, contingency planning is necessary whenever you determine that a secondary containment system for any part of the facility that might be the cause of a discharge as described in § 112.1(b) is not practicable. This requirement applies whether the facility is manned or unmanned, urban or rural, and for large and small facilities. In response to comment, we have revised the rule to exempt from the contingency planning requirement any facility which has submitted a response plan under § 112.20 because such a response plan is more comprehensive than a contingency plan following part 109.

We believe that it may be appropriate for an owner or operator to consider costs or economic impacts in determining whether he can meet a specific requirement that falls within the general deviation provision of § 112.7(a)(2). We believe so because under this section, the owner or operator will still have to utilize good engineering practices and come up with an alternative that provides "equivalent environmental protection." However, we believe that the secondary containment requirement in § 112.7(d) is an important component in preventing discharges as described in § 112.1(b) and is environmentally preferable to a contingency plan prepared under 40 CFR part 109. Thus, we do not believe it is appropriate to allow an owner or operator to consider costs or economic impacts in any determination as to whether he can satisfy the secondary containment requirement. Instead, the owner or operator may only provide a contingency Plan in his SPCC Plan and otherwise comply with § 112.7(d). Therefore, the purpose of a determination of impracticability is to examine whether space or other geographic limitations of the facility would accommodate secondary containment; or, if local zoning ordinances or fire prevention standards or safety considerations would not allow secondary containment; or, if installing secondary containment would defeat the overall goal of the regulation to prevent discharges as described in § 112.1(b).

We disagree that facility response planning is beyond our statutory authority, it is a procedure or method to remove discharged oil. *See* section 311(j)(1)(A) of the CWA. However, while we disagree that such planning is expensive and lacking in environmental benefit, we agree that the current contingency plan arrangements which reference 40 CFR part 109 should be sufficient to protect the environment, and that a facility response plan as described in § 112.20 is therefore unnecessary for a facility that is not otherwise subject to § 112.20. We agree with the commenter that structures or equipment might achieve the same or equivalent protection as response planning for some SPCC facilities. Therefore, we are withdrawing that part of the 1993 proposal related to response planning in proposed § 112.7(d)(1), but are retaining the current contingency planning provisions, which require a contingency plan following the provisions of 40 CFR part 109. We also believe that response plans should be reserved for higher risk facilities, as provided in § 112.20.

In following the provisions of part 109, you must address the oil removal contingency planning criteria listed in 40 CFR 109.5 and ensure that all response actions are coordinated with governmental oil spill response organizations. The absence of secondary containment will place extreme importance on the early detection of an oil discharge and rapid response by the facility to prevent that discharge. Part 109 was originally promulgated to assist State and local government oil spill response agencies to prepare oil removal contingency plans in the inland response zone, where EPA provides the On-Scene Coordinator. The basic criteria for contingency planning listed in § 109.5 apply to any SPCC regulated facility that has adequately justified the impracticability of installing secondary containment, irrespective of whether it is a government agency or the facility is located in the coastal (U.S. Coast Guard) or inland (EPA) response zone. Because the contingency plan involves good engineering practice and is technically a material part of the Plan, PE certification is required.

A contingency plan prepared under RCRA rules might suffice for purposes of the rule if the plan fulfills the requirements of part 109, and the PE certifies that such plan is adequate for the facility. If the RCRA contingency plan satisfies some but not all SPCC requirements, you must supplement it so that it does.

We note that the preamble to the 1993 proposed rule (at 58 FR 8841) suggested that response plans would not have to be submitted to the Regional Administrator unless "otherwise required by the rest of today's proposed rule." However, proposed § 112.7(a)(2) would have required that the owner or operator submit to the Regional Administrator any Plan containing a proposed deviation, including a deviation for the general secondary containment requirements in § 112.7(c). In any case, we agree with commenters that the contingency plan (or any other deviation) should not have to be submitted to the Regional Administrator for his review and approval because we believe that it is sufficient that the contingency plan (or other deviation) be available for on-site inspection. We have therefore withdrawn that part of the proposal. See also the discussion on § 112.7(a)(2).

Integrity and leak testing. In response to a commenter who asked for a clarification of integrity testing, "integrity testing" is any means to measure the strength (structural soundness) of the container shell, bottom, and/or floor to contain oil and may include leak testing to determine whether the container will discharge oil. Facility components that might cause a discharge as described in § 112.1(b) include containers, piping, valves, or other equipment or devices. Integrity testing includes, but is not limited to, testing foundations and supports of containers. Its scope includes both the

inside and outside of the container. It also includes frequent observation of the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas. Such testing is also applicable to valves and piping. See API Standard 653 for further information on this term.

Leak testing for purposes of the rule is testing to determine the liquid tightness of valves and piping and whether they may discharge oil. Facilities that store oil, whether they are mines or other businesses, are required to employ integrity testing for their bulk storage containers, and integrity and leak testing for their valves and piping, to help prevent discharges. Containers that do not store oil, but merely use oil, are not subject to the requirement.

We reaffirm the applicability of integrity and leak testing to both large and small facilities, because we believe such testing requirements help prevent discharges as described in § 112.1(b) at those facilities. However, we have modified our proposal in response to comments to only require such testing on a periodic basis instead of at a prescribed frequency. Integrity and leak testing requirements are also applicable for containers and valves and piping that are entirely within buildings, or within mines, because in either case, such containers, or valves and piping may become the source of a discharge as described in § 112.1(b). We have revised the rule to reflect that the requirement applies only to onshore and offshore bulk storage facilities. Therefore, a facility with only oil-filled electrical, operating, or manufacturing equipment need not conduct such testing nor incur any costs for such testing. For other types of facilities, we disagree that testing of valves and gathering lines would be prohibitively costly. In 1991, we estimated tank integrity testing and leak testing costs of buried piping. We estimated the costs as $465 per tank, $155 for equipment, and $310 for installation. Small facilities were assumed to have no buried piping. Medium sized facilities were assumed to bear first year costs for tank installation and testing of $4,704 and subsequent year costs of $1,449. Large facilities were assumed to incur a first year cost of $11,313, and subsequent year costs of $3,519. We assume that this provision represents a negligible additional burden because most facilities are already testing such valves and gathering lines according to industry standards as a matter of good engineering practice. We believe that if such testing is done in accordance with industry standards, costs will be minimized.

We have eliminated the proposed frequency of the testing, both for containers and for valves and piping, in favor of testing according to industry standards. Instead, we require "periodic" integrity testing of containers, and "periodic" integrity and leak testing of valves and piping. "Periodic" testing means testing according to a regular schedule consistent with accepted industry standards. We believe that use of industry standards, which change over time, will prove more feasible than providing a specific and unchanging regulatory requirement. As required by § 112.8(c)(6), integrity testing of containers must be accomplished by a combination of visual testing and some other technique.

Written commitment. A "written commitment" of manpower, equipment, and materials means either a written contract or other written documentation showing that you have made provision for those items for response purposes. Such commitment must be shown by: the identification and inventory of applicable equipment, materials, and supplies which are available locally and regionally; an estimate of the equipment, materials, and supplies which would be required to remove the maximum oil discharge to be anticipated; and, 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. 40 CFR 109.5(c).

The commitment also involves making provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including: specification of an oil discharge response operating team consisting of trained, prepared, and available operating personnel; 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 current national and regional contingency plans; a preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response actions; provisions for varying degrees of response effort depending on the severity of the oil discharge; and, 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. 40 CFR 109.5(d).

Industry standards. Industry standards that may assist an owner or operator with the integrity testing of containers, and the integrity and leak testing of piping and valves include: (1) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction"; (2) API Recommended Practice 575, "Inspection of Atmospheric and Low-Pressure Tanks"; (3) API Standard 570, "Piping Inspection Code (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems)"; (4) American Society of Mechanical Engineers (ASME) B31.3, "Process Piping"; (5) ASME 31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols"; (6) Steel Tank Institute Standard SP001–00, "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids"; and, (7) Underwriters Laboratory (UL) Standard 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids."

Editorial changes and clarifications. In the introductory paragraph, "tanks" becomes "containers." We revised the first sentence of the introduction which now reads, "When it is determined * * *," to read, "If you determine * * *." Later in that sentence we change the words "demonstrate such impracticability" to "explain why such measures are not practicable," in referencing the impracticability of secondary containment. Also, in the first sentence of the introduction, we clarify that the requirement for contingency planning and other measures is applicable when secondary containment is not practicable under §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), as well as § 112.7(c) and (h)(1). Additionally in that sentence, the reference to "prevent discharged oil from reaching navigable waters" becomes "to prevent a discharge as described in § 112.1(b)," conforming the geographic scope of the rule to the CWA. At the end of the paragraph we clarify that when secondary containment is not practicable, the contingency plan and written commitment must be provided in the Plan, rather than to the Regional Administrator. We also clarify that if you have submitted a facility response plan under § 112.20 for a facility, you need not provide for that facility either a contingency plan following the provisions of part 109, nor a written commitment of manpower, equipment, and materials required to expeditiously

control and remove any quantity of oil discharged that may be harmful.

In paragraph (d)(1), "A strong oil spill contingency plan following the provision of 40 CFR part 109 * * *." becomes "An oil spill contingency plan following the provisions of part 109 * * *." The word "strong" is unnecessary because in any case the contingency plan must follow the provisions of part 109.

In paragraph (d)(2), we did not finalize the proposed recommendation for the operator to consider financial capability in making his written commitment of manpower, equipment, and materials because we do not wish to confuse the regulated community with discretionary requirements in a mandatory rule. Finally, we changed the reference in paragraph (d)(2) from "to expeditiously control and remove any harmful quantity of oil discharged" to read "to expeditiously control and remove any quantity of oil discharged that may be harmful." We made this change to refer to the statutory standard referring to a quantity of oil "that may be harmful."

Section 112.7(e)—Inspections, Tests, and Records

Background. In 1991, we proposed that records and inspections and test results be kept for a period of five years. Current rules require record, inspection, and test results be maintained for three years. We also proposed that such records might be maintained with the Plan, instead of being part of the Plan.

In 1997, we returned to the three-year record maintenance period in our new proposal. In 1997, we also proposed that usual and customary business records, such as records maintained under API Standards 653 and 2610, would suffice to meet the requirements of this section. Finally we proposed that such records be made a part of the Plan.

Comments. 1991 comments. Maintenance with Plan. Most commenters favored the proposal that records might be maintained with the Plan, rather than as part of it. Two commenters thought the requirements should apply generally only to large facilities.

Form of records. One commenter urged use of electronic records.

Records required. Still another asked that we list all inspections and tests required by part 112. One commenter asked for a requirement to keep records and tests of all major repairs and of employee training.

Time period. Most commenters favored retaining the current three-year time period to maintain records, believing it is adequate. Some commenters objected to the cost of a five-year record retention requirement. One commenter favored a two-year record maintenance period. Several favored a phase-in period if five years were to be required so that three-year records could be brought into compliance with the rule. One commenter favored a requirement that records be maintained in accordance with other State and Federal agency requirements to avoid additional and unnecessary costs.

1997 comments. Maintenance with Plan. A number of commenters criticized the proposal that records must be maintained as part of the Plan, rather than maintained with the Plan, considering that proposal burdensome and providing no benefit to the environment.

Form of records. Several commenters asked that we clarify that use of records maintained under the API standards cited is not required. Another commenter noted that many smaller companies do not use API standards, and that use of such records should be allowed "when available." Several commenters urged that we state that records kept under the NPDES program might suffice for the SPCC program. Other commenters asked whether records in other formats might be acceptable, such as under a facility's QS–9000 or ISO–14000 system, or under standards promulgated by the Underwriters' Laboratories. Other commenters discussed use of NPDES stormwater bypass records. We will talk about those records under the discussion of § 112.8(c)(3)(iv).

Time period. Most commenters favored the proposal to retain the current three-year time period for maintenance of records.

Response to comments. Maintenance with Plan. We agree with commenters that it is not necessary to maintain records as part of the Plan. Therefore, today's rule allows "keeping" of the records "with" the Plan, but not as part of it. In the current rule, such records "should be made part of the SPCC Plan * * *." 40 CFR 112.7(e)(8). Because you continually update these records, this change will eliminate the need to amend your Plan each time you remove old records and add new ones. You still retain the option of making these records a part of the Plan if you choose.

Records required. The rule permits use of usual and customary business records, and covers all of the inspections and tests required by this part as well as any ancillary records. "Inspections and tests" include not only inspections and tests, but schedules, evaluations, examinations, descriptions, and similar activities required by this part. After publication of this rule, we will list all of the inspections and tests required by part 112 on our website (www.epa.gov/oilspill). The applicability of each inspection and test will depend on the exercise of good engineering practice, because not every one will be applicable to every facility.

Form of records. Records of inspections and tests required by this rule may be maintained in electronic or any other format which is readily accessible to the facility and to EPA personnel. Usual and customary business records may be those ordinarily used in the industry, including those made under API standards, Underwriters' Laboratories standards, NPDES permits, a facility's QS–9000 or ISO–14000 system, or any other format acceptable to the Regional Administrator. If you choose to use records associated with compliance with industry standards, such as Underwriters' Laboratories standards, you must closely review the inspection, testing, and recordkeeping requirements of this rule to ensure that any records kept in accordance with industry standards meets the intent of the rule. Some standards have limited recordkeeping requirements and may only address a particular aspect of container fabrication, installation, inspection, and operation and maintenance. The intent of the rule is that you will not have to maintain duplicate sets of records when one set has already been prepared under industry or regulatory purposes that also fully suffices for SPCC purposes. The use of these alternative record formats is optional; you are not required to use them, but you may use them.

Time period. We agree with commenters that maintenance of records for three years is sufficient for SPCC purposes, since that period will allow for meaningful comparisons of inspections and tests taken. Therefore, there will be no new costs. We note, however, that certain industry standards, for example API Standards 570 and 653, may specify record maintenance for more than three years.

Editorial changes and clarifications. As proposed in 1991, we affirm that the certifying engineer, as well as the owner or operator, may be a person who develops inspection procedures. We also affirm that the provision applies to both "inspections" and "tests" undertaken. The tests are usually integral parts of the inspections.

Section 112.7(f)—Employee Training and Discharge Prevention Procedures

Background. In 1991, we proposed that you conduct training exercises and that you train new employees within their first week of work. The rationale for these provisions was that a high percentage of discharges are caused by operator error; therefore, training and briefings might help prevent many discharges and promote a safer facility. This rationale was based on program experience and studies EPA undertook. The 1995 SPCC Survey found that operator error was the most common spill cause for facilities in 9 of the 19 industry categories that reported having spills. Also, the August 1994 draft report of the EPA Aboveground Oil Storage Facilities Workgroup called ''Soil and Ground Water Contamination from Aboveground Oil Storage Facilities: A Strategic Study'' presented data on causes of discharges from two studies. Both studies showed that error during product transfer activities is one of the biggest known causes of discharges at AST facilities. Two other studies also support our contention: Carter, W.J., ''How API Viewed the Needs for Aboveground Storage Tanks,'' Tank Talk, Vol. 7, July/August 1992, p.2.; and U.S. EPA, ''The Technical Background Document to Support the Implementation of OPA Response Plan Requirements,'' Emergency Response Division, Office of Solid Waste and Emergency Response, February 1993, p.4–19.

In 1993, we proposed to qualify the applicability of the training requirements to only those facilities that transfer or receive greater than or equal to 10,000 gallons of oil in a single operation more than twice per month on average, or greater than or equal to 50,000 gallons in a single operation more than once a month on the average. We further proposed that you require that employees involved in ''oil-handling activities,'' such as the operation or maintenance of oil storage tanks or the operation of equipment related to storage tanks, receive eight hours of facility specific training within one year of the effective date of the rule or at the date that your facility becomes subject to the requirement. In subsequent years, each employee would be required to undergo four hours of refresher training.

Our 1993 proposal would require training for new employees within one week of employment. We also proposed to specify the areas in which you would be required to train employees to include: training in correct equipment operation and maintenance, general facility operations, discharge prevention laws and regulations, and the contents of the facility's SPCC Plan. Finally, the proposal would require that you conduct unannounced drills, at least annually, in which oil-handling personnel would participate.

Comments. 1991 comments. Applicability of training requirements. Numerous commenters suggested that the training requirements should apply only to personnel involved in the operation or maintenance of equipment. They argued that the training requirements need not apply to clerks, secretaries, and similar employees who are not involved in the physical operations of the facility. They also argued that we failed to sufficiently account for training costs in our economic analysis. Another commenter asked for a small facility exemption from training requirements.

Another commenter asked that facilities be allowed to incorporate SPCC training requirements into already existing training programs required by other Federal or State law. One commenter suggested that the rule include a requirement that owners or operators document each training session and spill response drill conducted, and to maintain those records for five years.

Timing of employee training. Some commenters favored the proposed provision for yearly training exercises and suggested that the training be coordinated with local oil spill response organizations or Local Emergency Planning Committees (LEPCs) whenever possible. One commenter cautioned that the annual training should not be considered a full scale SPCC drill.

Opposing commenters suggested no time period for such exercises, or alternative periods, such as every two or three years.

Likewise, many commenters opposed the provision relating to the training of new employees within one week of employment. Opposing commenters argued generally that such a recommendation is impractical, and called for employer discretion in scheduling training. Others suggested varying time periods in lieu of one week. Those suggestions ranged from one month to one year, with alternatives suggested such as ''as soon as practical,'' ''prior to operation but before one year,'' ''within one week of job assignment,'' ''a more reasonable time period,'' ''after training,'' and ''until the next annual training for all employees.'' One commenter asked that we define the term ''new employee.''

Discharge prevention briefings. Many commenters criticized the proposal for annual spill prevention briefings, as opposed to the current requirement to hold such briefings ''at intervals frequent enough to assure adequate understanding of the SPCC Plan.'' They argued that the current standard is adequate. Some commenters suggested that we require additional training in these briefings such as emergency response training, or training concerning Plan changes.

1993 comments. Applicability of training requirements. In 1993, many commenters asked for clarification of what ''oil-handling'' personnel meant. Some thought the requirements for training should be limited to those employees engaged in response activities. Others questioned what ''on average'' meant in determining the threshold applicability of the rule. Still others asked what ''a single operation'' meant. Some asked that the requirements be limited to facilities with potential to cause ''substantial harm'' to the environment. Others asked that the requirements be relaxed for facilities with equipment that reduce the potential for discharges. Some suggested differing gallon thresholds for the applicability of the training requirements. One commenter suggested that training be limited to those employees involved in emergency response or countermeasure activities. One commenter asked for an exemption from this requirement for small facilities. Another commenter asked for an exemption for extraction facilities, because, he argued, they have few spills. Another commenter suggested that the 1991 proposal was adequate.

Timing of employee training. Some commenters favored the proposed requirement for eight-hour annual training, with four-hour refresher training in subsequent years. Others opposed it, arguing that employer discretion in this matter will ensure a better result.

Likewise many commenters opposed the requirement that new employees be trained within one week of employment, arguing instead for employer discretion. Some commenters suggested alternate frequencies other than one week, ranging from ''prior to assuming duties'' to up to six months after hiring.

Content of training. A few commenters supported the specification of training subjects. Some commenters suggested that we require training in the proper operation and maintenance of facility equipment and knowledge of spill procedure protocols. A utility commenter objected to the proposal that its employees be trained in maintenance of oil storage tanks, because its

maintenance activities do not involve the transfer or handling of oil and therefore fall outside the scope of the rule. Alternatively, the commenter suggested, those employees should be given a lower level of "awareness" training. One commenter suggested inclusion of response training.

Unannounced drills. Some commenters favored the proposal and suggested that actual discharge experience should be given credit as a drill. One commenter suggested a frequency schedule for various types of drills.

Some commenters criticized the proposal for at least yearly unannounced drills. One commenter suggested that the frequency of the drills should be at the operator's discretion. Commenters argued that, if required at all, drills should only be applicable to operational or response personnel. Two commenters said that a requirement for unannounced drills for all employees would require them to conduct at least eight or more drills a year. Another commenter suggested training instead of drills, because of the potential for drills to cause expensive shutdowns.

Response to comments. Applicability of training requirements. We believe that training requirements should apply to all facilities, large or small, including all those that store or use oil, regardless of the amount of oil transferred in any particular time. Training may help avert human error, which is a principal cause of oil discharges. "Spills from ASTs may occur as a result of operator error, for example, during loading operations (*e.g.*, vessel or tank truck—AST transfer operation), or as a result of structural failure (*e.g.*, brittle fracture) because of inadequate maintenance of the AST." EPA Liner Study, at 14. The 1995 SPCC Survey found that operator error was the most common spill cause for facilities in 9 of the 19 industry categories that reported having spills. Also, the August 1994 draft report of the EPA Aboveground Oil Storage Facilities Workgroup called "Soil and Ground Water Contamination from Aboveground Oil Storage Facilities: A Strategic Study" presented data on causes of discharges from two studies. Both studies showed that error during product transfer activities is one of the biggest known causes of discharges at AST facilities. Two other studies also support our contention: Carter, W.J., "How API Viewed the Needs for Aboveground Storage Tanks," Tank Talk, Vol. 7, July/August 1992, p.2.; and U.S. EPA, "The Technical Background Document to Support the Implementation of OPA Response Plan Requirements," Emergency Response Division, Office of Solid Waste and Emergency Response, February 1993, p.4–19. We have therefore retained the applicability of training to all facilities. The 1993 proposal would have limited training requirements to only certain facilities which received or transferred over the proposed amount of oil. Facilities which receive or transfer less than the proposed amount might also have discharges which could have been averted through required training. Also the proposed rule would have exempted many facilities that use rather than store oil from its scope. Therefore, we have provided in the rule that all facilities, whether bulk storage facilities or facilities that merely use oil, must train oil-handling employees because all facilities have the potential for a discharge as described in § 112.1(b), and training is necessary to avert such a discharge.

We agree with the commenter that training is only necessary for personnel who will use it to carry out the requirements of this rule. Therefore revised paragraph (f)(1) provides that only oil-handling personnel are subject to training requirements, as we proposed in 1993. Thus there are no new training costs because we have always required such training of oil-handling personnel. "Oil-handling personnel" is to be interpreted according to industry standards, but includes employees engaged in the operation and maintenance of oil storage containers or the operation of equipment related to storage containers and emergency response personnel. We do not interpret the term to include secretaries, clerks, and other personnel who are never involved in operation or maintenance activities related to oil storage or equipment, oil transfer operations, emergency response, countermeasure functions, or similar activities.

You may incorporate SPCC training requirements into already existing training programs required by other Federal or State law at your option or may conduct SPCC training separately.

You must document that you have conducted required training courses. Such documentation must be maintained with the Plan for three years.

Timing of employee training. We agree with commenters who thought it desirable to leave the timing and number of hours of training of oil-handling employees, including new employees, to the employer's discretion. "Proper instruction" of oil-handling employees, as required in the rule, means in accordance with industry standards or at a frequency sufficient to prevent a discharge as described in § 112.1(b). This standard will allow facilities more flexibility to develop training programs better suited to the particular facility. While the rule requires annual discharge prevention briefings, we also agree that the annual briefings required are not drills. In any case, the SPCC rules do not require drills, as explained below.

For purposes of the rule, it is not necessary to define a "new employee" because all oil-handling personnel are subject to training requirements, whether new or not. You do, however, have discretion as to the timing of that training, so long as the timing meets the requirements of good engineering practice.

Discharge prevention briefings. Annual discharge prevention briefings are necessary, but there should be more frequent briefings where appropriate. Such briefings are necessary to refresh employees' memories on facility Plan provisions and to update employees on the latest prevention and response techniques. Training must include the contents of the facility Plan. Although it is desirable, we disagree that we should require SPCC briefings to include emergency response training. That training is already required for those facilities which must prepare response plans.

Content of training. Specifying a minimum list of training subjects is necessary to ensure that facility employees are aware of discharge prevention procedures and regulations. As suggested by a commenter, we have added knowledge of discharge procedure protocols to the list of training subjects because such training will help avert discharges. Therefore, we have specified that training must include, at a minimum: the operation and maintenance of equipment to prevent the discharge of oil; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility Plan. As noted above, we require response training for facilities that must submit response plans, but such training is not necessary for all SPCC facilities.

In response to the utility commenter who asserted that utility employees do not need to be trained in the maintenance of oil storage tanks because such maintenance does not involve the transfer and handling of oil, we note that training must address relevant maintenance activities at the facility. If there is no transfer and handling of oil, such topic need not be covered in training.

Unannounced drills. The proposed yearly frequency for unannounced drills is also unnecessary because such drills are already required at FRP facilities, which are higher risk facilities. We do not believe that the risk at all SPCC facilities approaches the same level as at FRP facilities. Therefore, we are not finalizing this proposal, and there are no new costs.

Editorial changes and clarifications. We changed the title from ''Personnel, training, and spill prevention procedures,'' to ''Personnel, training, and discharge prevention procedures.'' In paragraph (f)(1), ''discharges of oil'' becomes ''discharges.'' In paragraph (f)(2), ''line management'' becomes ''facility management,'' and ''oil spill prevention'' becomes ''discharge prevention.'' In paragraph (f)(3), ''spill prevention briefings'' becomes ''discharge prevention briefings.'' Also in paragraph (f)(3); ''operating personnel'' becomes ''oil-handling'' personnel,'' to be consistent with language in paragraph (f)(1); and, ''spill events'' becomes ''discharges as described in § 112.1(b).''

Section 112.7(g)—Security (Excluding oil Production Facilities)

Background. In 1991, we proposed to turn into a recommendation the current requirement that a facility should be fully fenced, and gates locked and/or guarded when the facility is not in production or is unattended. We proposed to require that the master flow and drain valves (or other valves that will permit direct outward flow of the tanks' contents) have adequate security to ensure that they remain in a closed position when in non-operating or non-standby status. Thus, the proposal would allow more flexibility in the method of securing the valves than the current rule, which requires that such valves be ''securely locked.''

The current rule requires that loading/unloading connections be securely capped or blank-flanged when not in service or standby-service ''for an extended time.'' We proposed in 1991 to clarify that ''an extended time'' means six months or more, based on our Regional experience.

Comments. Editorial changes and clarifications. One commenter asked for the meaning of ''plant'' as used in proposed § 112.7(g)(1).

Applicability of requirement. One commenter urged an exemption from all security provisions for mobile facilities, because such facilities are manned 24 hours a day while in operation.

Fences. One commenter argued that fences should not be required for all facilities, because it is not practicable in some places. Another argued that fences should be topped with barbed wire, or otherwise designed to deter vandalism.

Starter controls on pumps. Several commenters argued that the requirements to lock starter controls on all pumps and to locate them at a site accessible only to authorized personnel are duplicative and do not deter vandals or other unauthorized personnel. Another commenter urged us to exclude large facilities from the locking requirement because the potential for losing keys or having the locks become inoperative due to freezing conditions is great. A third commenter suggested that the requirement should apply to facilities, and not to pumps.

Loading/unloading connections. One commenter urged that the blank-flanging requirement apply to facilities that are not in service for six months or more, rather than to connections of oil piping. The rationale was that larger facilities have seasonal or contractual variations in use of lines, pumps, racks, and connections. Therefore, it would be costly and impractical to blank off lines only to reopen them in the seventh month. Accordingly, the rule should, per the commenter, recognize normal operating procedures at such facilities and allow flexibility. Another commenter requested that ''quick disconnect'' fittings qualify as a method of secure capping.

Response to comments. Applicability of requirements. We asked in the 1991 preamble (at 56 FR 54616) for comments as to whether provisions proposed as discretionary measures or recommendations should be made requirements. We were concerned whether these proposed measures represented good engineering practice for all facilities. Specific comments are discussed below. In the case of proposed § 112.7(g)(1) and (5) as requirements, we have decided to retain the requirements as requirements rather than convert those paragraphs into recommendations as proposed. We have done this because we believe that fencing, facility lighting, and the other measures prescribed in the rule to prevent vandalism are elements of good engineering practice in most facilities, including mobile facilities. Where they are not a part of good engineering practice, we have amended the proposed provision allowing deviations, § 112.7(a)(2), to include the provisions in § 112.7(g).

Fences. Fencing helps to deter vandals and thus prevent the discharges that they might cause. In response to the commenter who argued that fences should be topped with barbed wire, or otherwise designed to deter vandalism, we agree. When you use a fence to protect a facility, the design of the fence should deter vandalism. Methods of deterring vandals might include barbed wire or other devices. If any type of fence is impractical, you may, under § 112.7(a)(2), explain your reasons for nonconformance and provide equivalent environmental protection by some other means.

Valves. Revised § 112.7(g)(2) requires you to ensure that the master flow and drain valves and other valves permitting outward flow of the container's contents have adequate security measures. The current rule requires that such valves be securely locked in the closed position when in non-operating or non-standby status. Today's revised rule allows security measures other than locking drain valves or other valves permitting outflow to the surface. Manual locks may be preferable for valves that are not electronically or automatically controlled. Such locks may be the only practical way to ensure that valves stay in the closed position. For electronically controlled or automated systems, no manual lock may be necessary. The rule gives you discretion in the method of securing valves. We believe that this flexibility is necessary due to changes in technology and in the use of manual and electronic valving.

Starter controls on pumps. We disagree that the requirements to have the starter control locked in the off position and be accessible only to authorized personnel are redundant. Restricting access to such pumps prevents unauthorized personnel from accidentally opening the starter control. These measures are necessary to prevent discharges at small as well as large facilities because the threat of discharge is the same regardless of the size of the container, and a small discharge may be harmful to the environment. If the potential for losing keys, weather conditions such as frequent freezing, or other engineering factors render such a measure infeasible, you may use the deviation provisions in § 112.7(a)(2) if you can explain your reasons for nonconformance and provide equivalent environmental protection by some other means.

Loading/unloading connections. In response to comment, we have decided to retain the current time line in § 112.7(g)(4), *i.e.*, ''an extended time,'' instead of specifying a six-month time line, due to the need for operational flexibility at facilities. We define ''an extended time'' in reference to industry standards or, in the absence of such standards, at a frequency sufficient to prevent any discharge. The appropriate method of securing or blank flanging of

these connections is a matter of good engineering practice, and might include "quick disconnect fittings" as a possible deviation under § 112.7(a)(2). In any case, a secure cap is one equipped with some kind of lock or secure closure device to prevent vandalism. We disagree that the requirements of this paragraph should apply to the owner or operator of a facility instead of the owner or operator of the piping because a facility might place only some piping out of service for a period of time, and let other piping remain in service. Therefore, the owners or operators of some piping might escape the requirements of the rule and be more likely to discharge oil.

Industry standards. Industry standards that may assist an owner or operator with security purposes include: (1) API Standard 2610, Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities; and, (2) NFPA 30A, Automotive and Marine Service Station Code, Flammable and Combustible Liquids Code.

Editorial changes and clarifications. We agree that the term "plant" has no clear meaning. Therefore, in paragraph (g)(1), we have substituted the term "facility" in its place, which is a defined term in these rules. Also in that paragraph, the phrase "handling, processing and storing oil" becomes "handling, processing or storing oil." In paragraph (g)(2), "tank" becomes "container." In paragraph (g)(3), "pumps" becomes "pump." In paragraph (g)(5), the phrase "Consideration should be given to:" is deleted. We revise the sentence to read, "Provide facility lighting commensurate with the type and location of the facility that will assist in the: * * *"

Section 112.7(h)—Loading/Unloading (Excluding Offshore Facilities)

Background. In 1991, we reproposed the current discharge prevention requirements for loading/unloading racks.

Comments. In general. Several commenters opposed the proposal on the basis that a requirement for a strong contingency plan would be a preferable and more effective alternative. Another commenter asked that we clarify that only facilities routinely used for loading or unloading of tanker trucks from or into aboveground bulk storage tanks are subject to this provision. One commenter believed that the proposed rule regulates items which "should be covered" by DOT rules governing loading, unloading, and vehicle inspection.

Editorial changes and clarifications. One commenter asked for a clarification of the term "quick drainage system."

Another commenter recommended that instead of mandatory containment requirements, a facility be allowed to show that procedures are in place to ensure that personnel are present at all times to supervise tank truck loading and unloading. Additionally, that commenter recommended that all new or renovated loading/unloading areas provide, at a minimum, curbing, sloped concrete, trenching, tanks, or basins which could contain at least five percent by volume of the largest compartment of the tank car or truck. For existing facilities, that commenter suggested that containment might contain a lesser volume, provided that the entire area is constructed of impervious material, no reported releases have occurred, and that loading/unloading activities are supervised.

Alarm or warning systems. One commenter asked whether the requirement to provide a warning light or physical barrier system, or warning signs, applied to tank batteries or just plants. Another suggested that a vehicle brake interlock system or similar system might work just as well. Still another suggested the use of wheel chocks during tank truck transfers.

Vehicle drain closure. Two commenters opposed the proposed requirement that vehicle drains and outlets be examined for leakage and if necessary repaired to prevent liquid leaks during transit. They argued that the facility owner had little or no control over trucks that were owned by others which loaded or unloaded at a facility and could not ensure their compliance with the rules.

Response to comments. In general. This section is applicable to any non-transportation-related or terminal facility where oil is loaded or unloaded from or to a tank car or tank truck. It applies to containers which are aboveground (including partially buried tanks, bunkered tanks, or vaulted tanks) or completely buried (except those exempted by this rule), and to all facilities, large or small. All of these facilities have a risk of discharge from transfers. Our Survey of Oil Storage Facilities (published in July 1996) showed that as annual throughput increases, so does the propensity to discharge, the severity of the discharge, and, to a lesser extent, the costs of the cleanup. Throughput increases are often associated with transfers of oil.

The requirements contained in this section, including those for secondary containment, warning systems, and inspection of trucks or cars for discharges are necessary to help prevent discharges. If you can justify a deviation for secondary containment requirement in paragraph (h)(1) on the basis that it is not practicable from an engineering standpoint, you must provide a contingency plan and take other actions to comply with § 112.7(d). If you seek to deviate from any of the requirements in paragraphs (h)(2) or (3), you must explain your reasons for nonconformance, as provided in § 112.7(a)(2), and provide measures affording equivalent environmental protection.

We disagree that a contingency plan (whether labeled "strong" or otherwise) is a preferable alternative to secondary containment. Secondary containment is preferable because it may prevent a discharge that may be harmful as described in § 112.1(b). A contingency plan is a plan for action when such discharge has already occurred. However, as noted earlier, if secondary containment is not practicable, you must provide a contingency plan and take other actions as required by § 112.7(d). EPA will continue to evaluate the issue of whether the provisions for secondary containment found in § 112.7(h)(1) should be modified or revised. We intend to publish a notice asking for additional data and comment on this issue.

We disagree that the section regulates activities already under the purview of the U.S. Department of Transportation. We regulate the environmental aspects of loading/unloading transfers at non-transportation-related facilities, which are legitimately part of a prevention plan. DOT regulates other aspects of those transfers, such as safety measures.

Other State or Federal law. We have withdrawn, as unnecessary, proposed § 112.7(h)(1), which would have required that facilities meet the minimum requirements of Federal and State law. Those requirements apply whether they are mentioned or not.

Secondary containment. As noted above, the requirement for secondary containment applies to all facilities, whether with aboveground or completely buried containers. This includes production facilities and small facilities. The method of secondary containment must be one of those listed in the rule (see § 112.7(c)), or some similar system that provides equivalent environmental protection. The choice of method is one of good engineering practice. However, in response to comments, we note that sumps and drip pans are a listed method of secondary containment for offshore facilities. A catchment basin might be an acceptable

form of retention pond for an onshore facility. Whatever method is implemented, it must be capable of containing the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the facility. A discharge from the maximum capacity of any single compartment of a tank car or tank truck includes a discharge from the tank car or tank truck piping and hoses. This is the largest amount likely to be discharged from the oil storage vehicle. A requirement that secondary containment be able to hold only five percent of a potential discharge when procedures are in place to prevent discharges fails to protect the environment if there is human error in one of those procedures. In case of discharge, the secondary containment system must be capable of preventing a discharge from that maximum capacity compartment to the environment. As mentioned above, if secondary containment is not practicable, you may be able to deviate from the requirement if you provide a contingency plan and otherwise comply with § 112.7(d).

Alarm or warning systems. The requirement to provide a warning light or other physical barrier system applies to the loading/unloading areas of facilities. We have amended the rule on the suggestion of a commenter to include ''vehicle brake interlock system'' and ''wheel chocks.'' The examples listed in the rule of potential warning systems are merely illustrative. Any other alarm or warning system which serves the same purpose and performs effectively will also suffice to meet this requirement.

Vehicle drain closure. We believe that the requirement to check vehicles for discharge is important to help prevent discharges. If the check were not done, the entire contents of the vehicle might be discharged. We further believe that the responsibility for compliance with proposed § 112.7(h)(3), as well as with all provisions of the rule, continues to rest with the owner or operator of the facility when those vehicles are loading or unloading oil at the facility.

Industry standards. Industry standards that may assist an owner or operator with loading and unloading areas include: (1) NFPA 30, ''Flammable and Combustible Liquids Code''; and, (2) API Standard 2610, ''Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities.''

Editorial changes and clarifications. In paragraph (h)(1), for clarity, ''plant'' is changed to ''facility.'' The phrase ''to handle spills'' becomes ''to handle discharges.'' A ''quick drainage system'' is a device which drains oil away from the loading/unloading area to some means of secondary containment or returns the oil to the facility. For § 112.7(h)(1), if secondary containment is not practicable, you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d). Also, in paragraph (h)(1), ''tank truck'' becomes ''tank car or tank truck.'' In paragraph (h)(2), ''prevent vehicular departure,'' becomes ''prevent vehicles from departing.'' In paragraph (h)(3), ''leakage'' becomes ''discharge.'' ''Discharge'' is a broader term, of which ''leakage'' is a subset. Also in that paragraph, ''examine'' becomes ''inspect.''

Section 112.7(i)—Brittle Fracture Evaluation

Background. In 1993, we proposed to require that you evaluate your field-constructed tanks for brittle fracture if those tanks undergo repair, alteration, or a change in service. You would have been required to evaluate those tanks by adherence to industry standards contained in American Petroleum Institute (API) Standard 653, entitled ''Tank Inspection, Repair, Alteration, and Reconstruction.'' The rationale was to help prevent the failure of field-constructed tanks due to brittle fracture, such as the four million gallon aboveground Ashland Oil tank failure which occurred in January 1988.

Comments. Applicability. Several commenters favored the proposal. One suggested that we incorporate API Standard 653 into our rules to accommodate the possibility of tank failures other than through brittle fracture. One commenter opposed the proposal on the basis that the evaluation was unnecessary for small volume tanks and tanks with secondary containment. Other commenters argued that such testing was unnecessary for steel-bolted tanks because such tanks are too thin to be subject to brittle fracture since material properties are uniform through the thickness. One commenter asked that small facilities be exempted from the proposed requirement.

Editorial changes and clarifications. Two commenters asked what the term ''change in service'' means. Others asked for clarification of the term ''field-erected tank.'' Another asked for clarification of the term ''repair,'' so that it would exclude ordinary day-to-day maintenance activities which are conducted to maintain the functional integrity of the tank and do not weaken the tank.

Alternatives to brittle fracture evaluation. One commenter suggested that we allow testing by acoustic emission testing.

Response to comments. Applicability. The requirement to evaluate field-constructed tanks for brittle fracture whenever a field-constructed aboveground container undergoes repair, alteration, reconstruction, or change in service is necessary because brittle fracture may cause sudden and catastrophic tank failure, resulting in potentially serious damage to the environment and loss of oil. The requirement must be applicable to large and small facilities alike, because all the field-constructed aboveground containers have a risk of failure. The presence or absence of secondary containment does not eliminate the need for brittle fracture evaluation because the intent of the rule is to prevent a discharge whether or not it will be contained. While the requirement applies to all field-constructed aboveground containers, if you can show that the evaluation is unnecessary for your steel-bolted tanks, you may deviate from the requirement under § 112.7(a)(2) if you can explain your reasons for nonconformance and provide equivalent environmental protection. We note that portions of steel-bolted tanks, such as the bottom or roof, may be welded, and therefore subject to brittle fracture.

The requirement for evaluation of a field-constructed aboveground container must be undertaken when the container undergoes a repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to brittle fracture, or when a discharge or failure has already occurred due to brittle fracture or other catastrophe. Catastrophic failures are failures which may result from events such as lightning strikes, dangerous seismic activity, etc. As a result of a catastrophic failure, the entire contents of a container may be discharged to the environment in the same way as if brittle fracture had occurred.

''Repair'' means any work necessary to maintain or restore a container to a condition suitable for safe operation. Typical examples include the removal and replacement of material (such as roof, shell, or bottom material, including weld metal) to maintain container integrity; the re-leveling or jacking of a container shell, bottom, or roof; the addition of reinforcing plates to existing shell penetrations; and the repair of flaws, such as tears or gouges, by grinding or gouging followed by welding. We understand that some repairs (such as repair of tank seals), alterations, or changes in service will not cause a risk of failure due to brittle

fracture; therefore, we have amended the rule to refer to those repairs, alterations, reconstruction, or changes in service that affect the risk of a discharge or failure due to brittle fracture.

"Alteration" means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configurations of the container. Typical examples include the addition of manways and nozzles greater than 12-inch nominal pipe size and an increase or decrease in tank shell height.

Alternatives to brittle fracture evaluation. We have eliminated the incorporation by reference to API Standard 653 from the rule. We have also therefore withdrawn proposed Appendix H, the API Standard 653 brittle fracture flowchart. We believe that API Standard 653 is an acceptable standard to test for brittle fracture. However, an incorporation by reference of any standard might cause the rule to be instantly obsolete should that standard change or should a newer, better method emerge. A potential standard might also apply only to a certain subset of facilities or equipment. Therefore, as with most other requirements in this part, if you explain your reasons for nonconformance, alternative methods which afford equivalent environmental protection may be acceptable under § 112.7(a)(2). If acoustic emission testing provides equivalent environmental protection it may be acceptable as an alternative. That decision, in the first instance, is one for the Professional Engineer and owner or operator.

Industry standards. Industry standards that may assist an owner or operator with brittle fracture evaluation include: (1) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction"; and, (2) API Recommended Practice 920, "Prevention of Brittle Fracture of Pressure Vessels."

Editorial changes and clarifications. A "field-constructed aboveground container" is one that is assembled or reassembled outside the factory at the location of its intended use. A "change in service" is a change from previous operating conditions involving different properties of the stored product such as specific gravity or corrosivity and/or different service conditions of temperature and/or pressure. The word "reconstruction" was added in the first sentence to conform with the text in API Standard 653. The words "discharge or" were added prior to "failure" and "brittle fracture failure" to make clear that evaluation is necessary when there has been a discharge from the container, whether or not there has been a complete failure of the container due to brittle fracture or catastrophe. When a container has failed completely and will be replaced, no brittle fracture or catastrophe evaluation is necessary. The evaluation is only applicable when the original container remains, but the physical condition of the container has changed due to repair, alteration, or change in service.

Section 112.7(j)—State Rules

Background. In the introduction to § 112.7(e) of the current rule, an owner or operator is required to discuss in the Plan his conformance with § 112.7(c), plus other applicable parts of § 112.7, other effective spill prevention and containment procedures or, if more stringent, with State rules, regulations, and guidelines. In our 1991 proposal, we limited the required discussion of "other effective spill prevention and containment procedures" to those listed in §§ 112.8, 112.9, 112.10, and 112.11, or if more stringent, with State rules, regulations, and guidelines.

Comments. Cross-referencing of requirements. One commenter argued that the proposed requirements should be more clearly limited to those sections which are applicable to the facility in question. For example, the commenter asserted, "requirements in § 112.8 '* * *onshore facilities (excluding production facilities)' should not (by the requirement in § 112.7(i)) be applied to any portion of any production facility."

Consistency in rules. Two States urged that our rules be as consistent as possible with rules in the States. Another State urged that we grant reciprocity to State-approved Plans which have been reviewed under equal or greater adequacy criteria. One commenter complained that EPA rules are in some cases more stringent than some State rules.

Federal and State regulation. Two commenters argued against any State regulation in the SPCC area to avoid duplication. Conversely, another commenter argued against any Federal regulation because the States are better qualified to regulate in the SPCC arena.

Preemption. Another State requested that EPA strive to have similar programs as the States, or at the least not to preempt the States in the regulation of SPCC matters.

Response to comments. Cross-referencing of requirements. In response to the commenter who believed that proposed § 112.7(i) (redesignated in today's rule as § 112.7(j)) might require him to discuss inapplicable requirements, we note that you must address all SPCC requirements in your Plan. You must include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in part 112 or any applicable more stringent State rule, regulation, or guideline. If a requirement is not applicable to a particular type of facility, we believe that it is important for an owner or operator to explain why.

Consistency in rules. As noted above, you may now use a State plan as a substitute for an SPCC Plan when the State plan meets all Federal requirements and is cross-referenced. When you use a State plan that does not meet all Federal requirements, it must be supplemented by sections that do meet all Federal requirements. At times EPA will have rules that are more stringent than States rules, and some States may have rules that are more stringent than those of EPA. If you follow more stringent State rules in your Plan, you must explain that is what you are doing.

Federal and State regulation. Both the States and EPA have authority to regulate containers storing or using oil. We believe State authority to regulate in this area and establish spill prevention programs is supported by section 311(o) of the CWA. Some States have exercised their authority to regulate while others have not. We believe that State SPCC programs are a valuable supplement to our SPCC program.

Preemption. We do not preempt State rules, and defer to State rules, regulations, and guidelines that are more stringent than part 112.

Editorial changes and clarifications. To simplify the rule language, we have amended the proposed rule to state that you must discuss all applicable requirements in the Plan instead of listing all of the sections individually. The phrase "sections of the Plan shall include* * *" becomes "include in your Plan* * *." "Spill" becomes "discharge."

Subpart B—Requirements for Petroleum Oils or Other Non-petroleum Oils, Except Animal Fats and Vegetable Oils

Background. As noted above, we have reformatted the rule to differentiate between various classes of oil as mandated by EORRA. Subpart B prescribes particular requirements for an owner or operator of a facility that stores or uses petroleum oils or non-petroleum oils, except for animal fats and vegetable oils.

Introduction to Section 112.8

Background. We have inserted an introduction to § 112.8 so that we could list the requirements of that section in the active voice. Those requirements, except as specifically noted, apply to the owner or operator of an onshore facility (except a production facility). The introduction does not result in any substantive change in requirements.

Section 112.8(a)—General Requirements—Onshore Facilities (Excluding Production Facilities)

Background. This is a new provision that merely references the general requirements which all facilities subject to this part must meet and the specific requirements that facilities subject to this section must meet. It does not result in any change to substantive requirements.

Editorial changes and clarifications. "Spill prevention" in the 1991 proposal becomes "discharge prevention." We also deleted from the titles of each paragraph the words "onshore" and "excluding production facilities" because the entire section applies to onshore facilities and excludes production facilities from its scope. Finally, the proposed requirement to "address" general and specific requirements and procedures becomes "meet" those requirements and procedures.

Section 112.8(b)(1)—Diked Storage Area Drainage

Background. In 1991, we reproposed the current rule (§ 112.7(e)(1)(i)) on facility drainage from diked areas.

Comments. Applicability. One commenter asked that we limit the scope of this section to facilities having areas with the potential to receive discharges greater than 660 gallons or areas with tanks regulated under these rules. Another commenter said that for facilities with site-wide containment, or that have substantial stormwater draining onto and across the site, the requirement is not practical and may justify reliance on contingency plans instead of containment. That commenter, and another, suggested that certain devices may reduce the potential of a significant spill of floating or other products that can be separated by gravity, such as oil/water separators, underflow uncontrolled discharge devices, and other apparatus.

De minimis amounts of oil. One commenter thought it would be impossible to ensure no oil would be discharged into water from diked areas. The rationale was that oil can be present in water in an amount below the perception threshold of the human eye.

Response to comments. Applicability. We disagree that we should limit the scope of this section to facilities having areas with the potential to receive discharges greater than 660 gallons or areas with tanks regulated under these rules. Small discharges (that is, of 660 gallons or less) as described in § 112.1(b) from diked storage areas can cause great environmental harm. See section IV. F of this preamble for a discussion of the effects of small discharges. We disagree that this section should apply only to areas with tanks regulated under these rules because this rule applies to regulated facilities, not merely areas with regulated tanks or other containers. A facility may contain operating equipment within a diked storage area which could cause a discharge as described in § 112.1(b).

We disagree that the requirement is not practical for facilities with site-wide containment, or that have substantial stormwater draining onto and across the site. Where oil/water separators, underflow uncontrolled discharge devices, or other positive means provide equivalent environmental protection as the discharge restraints required by this section, you may use them, if you explain your reasons for nonconformance. See § 112.7(a)(2). However, you must still ensure that no oil will be discharged when using alternate devices.

De minimis amounts of oil. This rule is concerned with a discharge of oil that would become a discharge as described in § 112.1(b). When oil is present in water in an amount that cannot be perceived by the human eye, the discharge might not meet the description provided in 40 CFR 110.3. Therefore, such a discharge might not be a discharge in a quantity that may be harmful, and therefore not a reportable discharge under part 110. However, a discharge which is invisible to the human eye might also contain components (for example, dissolved petroleum components) which would violate applicable water quality standards, making it a reportable discharge. Therefore, we are keeping the language as proposed, other than making some editorial changes.

Industry standards. Industry standards that may assist an owner or operator with facility drainage include: (1) NFPA 30, "Flammable and Combustible Liquids Code"; and (2), API Standard 2610, "Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities."

Editorial changes and clarifications. "Spill or other excessive leakage of oil" and "leakage" become "discharge." The phrase "handle such leakage" becomes "control such discharge." We deleted the phrase "or other positive means," because it is confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you have the flexibility to use alternate measures ensuring equivalent environmental protection. The word "examine" becomes "inspect."

Section 112.8(b)(2)—Diked Storage Areas—Valves Used; Inspection of Retained Stormwater

Background. In 1991, we reproposed the current rule on the type of valves that must be used to drain diked storage areas. The rule also addresses inspection of retained stormwater.

Comments. Innovative devices. Two commenters believed that the rule would apparently preclude the use of innovative containment devices to control discharges from containment dikes, such as imbiber beads. These beads are inside a small cylinder that filters releases from a containment area. The beads are inserted where a valve would be placed and allow water to pass, but prevent release of oil by closing on contact. Another commenter asked that the rule allow oil-water gravity separation systems instead of valves.

PE certification. One commenter suggested that a section should be added to the rule requiring that Professional Engineers be required to certify the design and construction of the stormwater drainage system and the sanitary sewer system, because the Professional Engineer is in the best position to prepare the spill containment parts of the SPCC Plan.

Response to comments. Innovative devices. This rule does not preclude innovative devices that achieve the same environmental protection as manual open-and-closed design valves. If you do not use such valves, you must explain why. The provision for deviations in § 112.7(a)(2) allows alternatives if the owner or operator states his reasons for nonconformance, and if he can provide equivalent environmental protection by some other means. However, you may not use flapper-type drain valves to drain diked areas. And if you use alternate devices to substitute for manual, open-and-closed design valves, you must inspect and may drain retained stormwater, as provided in § 112.8(c)(3)(ii), (iii), and (iv), if your facility drainage drains directly into a watercourse, lake, or pond bypassing the facility treatment system.

PE certification. PE certification is already required for the design of

stormwater drainage and sanitary sewer systems by current rules because those systems are a technical element of the Plan. Therefore, we are keeping the language as proposed.

Editorial changes and clarifications. In the first sentence, we deleted the phrase "as far as practical" because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if the requirement is not practical, you have the flexibility to use measures ensuring equivalent environmental protection. In the second sentence, we clarify that the wastewater treatment plant mentioned therein is an "on-site wastewater treatment plant." Also in that sentence, we clarify that you must inspect and "may drain" retained stormwater, as provided in § 112.8(c)(3)(ii), (iii), and (iv). Finally, in the last sentence, we clarify that drained retained stormwater must be "uncontaminated."

Section 112.8(b)(3)—Drainage Into Secondary Containment; Areas Subject to Flooding

Background. In 1991, we proposed to clarify that only undiked areas that are located such that they have a reasonable potential to be contaminated by an oil discharge are required to drain into a pond, lagoon, or catchment basin. We explained that a good Plan should seek to separate reasonably foreseeable sources of contamination and non-contamination.

We also proposed to make a recommendation of the current requirement that catchment basins not be located in areas subject to periodic flooding.

Comments. One commenter supported the proposal.

Editorial changes and clarifications. One commenter suggested that the rule should be worded to refer to systems "with a potential for discharge," rather than with a "potential for contamination."

Applicability. Two commenters argued that the secondary containment provisions of this paragraph should "remain a recommendation as opposed to a regulation," because a requirement is impracticable for drainage systems from pipelines that move product throughout the facility.

Alternatives. One commenter said that the rule should not be limited to drainage trenches, and that the owners and operators of facilities should have a free choice of design. Another commenter suggested that if areas under aboveground piping and loading/unloading areas are regulated under this section, the operation should have the option of providing spill control by committing to the regular inspection of, and immediate clean-up of spills within such areas. Another commenter urged that we clarify that oil/water separators meet the requirement for drainage control and secondary containment because such units, when properly sized and operated, meet the requirements of good engineering practice for preventing discharges of oil. One commenter suggested that in rural areas where electrical equipment is widely spaced, it may be more practical to provide for individual secondary containment rather than site-wide diversion facilities. Other commenters suggested that the drainage requirements in urban areas would be impossible to meet for transformers located in vaults in large office and apartment buildings, and underneath urban streets because there is no space at such sites to construct the sort of drainage control structures required by the rule.

Areas subject to periodic flooding. One commenter argued that the proposed recommendation should be retained as a requirement because it is highly unlikely that catchment basins would operate effectively during a flood event, and that these facilities could cause significant harm to the environment. Another commenter suggested that drainage systems for existing facilities be engineered (even if it requires pumping of contaminated water to a higher level for storage prior to treatment) so that minimal amounts of contaminated water are retained in areas subject to periodic flooding.

Response to comments. Applicability. We disagree that the rule language should become a recommendation because we believe that it is important to control the potential discharges the rule addresses. Where a drainage system is infeasible, if you explain your reasons for nonconformance, you may provide equivalent environmental protection by an alternate means.

In response to the commenter who questioned the applicability of this paragraph to areas under aboveground piping and loading/unloading areas, we note that both areas are subject to the rule's requirements if they are undiked.

Alternatives. The rule does not limit you to the use of drainage trenches for undiked areas. Other forms of secondary containment may be acceptable. The rule only prescribes requirements for the drainage of diked areas, but does not mandate the use of diked areas. However, if you do use diked areas, the rule prescribes minimum requirements for drainage of those areas. Also, if the requirement is not practical, you may explain your reasons for nonconformance and provide equivalent environmental protection under § 112.7(a)(2).

Areas subject to periodic flooding. We agree with the commenter that the current requirement should remain a requirement and not be converted into a recommendation. We are convinced by the argument that catchment basins will not work during flood events and may cause significant environmental damage. We also agree with the commenter that any drainage system should be engineered so that minimal amounts of contaminated water are retained in areas subject to periodic flooding. Therefore, we have retained the current requirement. We also recommend, but do not require that ponds, lagoons, or other facility drainage systems with the potential for discharge not be located in areas subject to periodic flooding.

Editorial changes and clarifications. We agree that the wording "potential for discharge" meets the intent of the rule better than "potential for contamination" and have made that change.

Section 112.8(b)(4)—Diversion Systems

Background. In 1991, we proposed that diversion systems must retain oil in the facility, rather than return it to the facility after it has been discharged.

Comments. One commenter asked for a clarification that oil "retained" in a facility does not leave the facility boundaries. A second commenter suggested that oil be either retained within the facility or returned to the facility, whichever is applicable. The commenter further suggested that the diversion system apply only to the petroleum areas of the facility such as tanks, pipes, racks, and diked areas because drainage from the rest of the facility should not be contaminated and thus should not have to be diverted.

Response to comments. The rule accomplishes the aim of retaining within the facility minimal amounts of contaminated water in undiked areas subject to periodic flooding. It is better that a diversion system retain rather than allow oil to leave the facility, thus enhancing the prevention goals of the rule. Furthermore, it should be easier to retain discharged oil rather than retrieve oil that has been discharged from the facility. Therefore, we agree with the commenter that "retained" oil is oil that never leaves the facility. We also agree that the rule applies only to drainage from the "petroleum" (or other oil) areas of the facility such as tanks, pipes, racks, and diked areas, because the purpose of the SPCC rule is to prevent discharges of oil, not of all runoff contaminants. Amendment of the rule

language is unnecessary because all of the rule applies only to "petroleum" or "oil" areas of the facility. Therefore, we have promulgated the rule language as proposed with a minor editorial change.

Editorial changes and clarifications. We clarify that the reference to the engineering of facility drainage is a reference to paragraph (b)(3).

Section 112.8(b)(5)—Natural Hydraulic Flow, Pumps

Background. In 1991, we reproposed substantively the current rule (see § 112.7(e)(1)(v)) concerning hydraulic flow and pump transfer for drainage waters.

Comments. We received one editorial comment regarding a grammatical error in the proposal. The commenter suggested that the second sentence of the proposal read, "If pump transfer is needed, two "lift" pumps shall be provided, and at least one of the pumps shall be permanently installed when such treatment is continuous." We received no substantive comments.

Editorial changes and clarifications. We deleted the first sentence from the proposed rule because it is a recommendation. We are not including recommendations in this rule so as to avoid confusion in the regulated community as to what is required and what is not. We agree with the commenter's editorial suggestion regarding the second sentence, and have amended the rule accordingly. In the last sentence of the proposal, the phrase "oil will be prevented from reaching navigable waters of the United States, adjoining shorelines, or other waters that would be affected by discharging oil as described in § 112.1(b)(1) of this part" becomes " to prevent a discharge as described in § 112.1(b). * * *"

Response to comments. We have corrected the grammatical error.

Proposed Section 112.8(b)(6)—Additional Requirements for Events that Occur During a Period of Flooding

Background. In 1991, we proposed a new recommendation that facilities should address the need to comply with Federal, State, and local governmental requirements in areas subject to flooding. We noted that this recommendation was consistent with Federal Emergency Management Agency (FEMA) rules found at 44 CFR part 60 for aboveground storage tanks located in flood hazard areas.

Comments. One commenter suggested that exploration and production tanks located in flood plain areas should be adequately secured through proper mechanical or engineering methods to reduce the chance of loss of product. Another commenter argued that the proposed rule should be eliminated because it is duplicative of stormwater regulations. One commenter urged that the rule require that no facilities for oil or hazardous substances be sited in floodplains. Another commenter requested that the rule require that: (1) A facility should identify whether it is in a floodplain in the SPCC Plan; (2) if it is in a floodplain, the Plan should address minimum FEMA standards; and, (3) if a facility does not meet minimum FEMA standards, the Plan should address appropriate precautionary and mitigation measures for potential flood-related discharges. The commenter also suggested that we consider requiring facilities in areas subject to 500-year events to address minimum FEMA standards. A second commenter supported a requirement for special considerations in the Plan for facilities in areas subject to flooding. That commenter also suggested that we define "areas subject to flooding," and noted that other Federal rules (i.e., RCRA) define this as the 25-year floodplain. Another commenter thought the term "areas subject to flooding" should be explained in terms of a 100-year flood event. A final comment noted that the preamble spoke to a recommendation that facilities address precautionary measures if they are located in areas subject to flooding, while the recommendation text spoke to requirements for events that occur during a period of flooding. The commenter urged reconciliation of the differing language.

Response to comments. We deleted this recommendation because it is more appropriately addressed in FEMA rules and guidance, including the definitions the commenters referenced. We disagree that the proposed recommendation should be made a requirement because flood control plans and design capabilities for discharge systems are provided for under the stormwater regulations, and further Federal regulations would be duplicative.

Other Federal rules also apply, making further SPCC rules unnecessary. Oil storage facilities are considered structures under the National Flood Insurance Program (NFIP), and therefore such structures are subject to the Regulations for Floodplain Management at 44 CFR 60.3. Some of the specific NFIP standards that may apply for aboveground storage tanks include the following: (1) tanks must be designed so that they are elevated to or above the base flood level (100-year flood) or be designed so that the portion of the tank below the base flood level is watertight with walls substantially impermeable to the passage of water, with structural components having the capability of resisting hydrostatic and hydrodynamic loads, and with the capability to resist effects of buoyancy (44 CFR 60.3(a)(3)); (2) tanks must be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads and the effects of buoyancy (40 CFR 60.3(c)(3)); for structures that are intended to be made watertight below the base flood level, a Registered Professional Engineer must develop and/or review the structural design, specifications, and plans for construction, and certify that they have been prepared in accordance with accepted standards and practice (40 CFR 60.3(c)(4)); and, tanks must not encroach within the adopted regulatory floodway unless it has been demonstrated that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge (40 CFR 60.3(d)). Additionally, the NFIP has specific standards for coastal high hazard areas. *See* 40 CFR 60.3(e)(4).

Section 112.8(c)(1)—Construction of and Materials Used for Containers

Background. In 1991, we reproposed without substantive change current § 112.7(e)(2)(i), which requires that no tank be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage such as pressure and temperature. The only changes we proposed were editorial. We also proposed a new recommendation that the construction, materials, installation, and use of tanks conform with relevant industry standards such as API, NFPA, UL, or ASME standards, which are required in the application of good engineering practice for the construction and operation of the tank.

Comments. Several commenters asked that the proposal be recast as a recommendation rather than a rule, arguing that the words of the proposal, when taken in conjunction with § 112.7(a) language requiring the use of good engineering practice in the preparation of Plans, were contradictory. A commenter noted that § 112.8(c)(1) *recommends* that materials, construction, and installation of tanks adhere to industry standards "*which are required in the application of good engineering practice* for the construction and operation of the tank." The commenter asserted that since it is clear in the preamble that the Agency's intent is to make the use of industry standards a recommendation rather than a

requirement, the rule should be modified to reflect that. Another commenter supported the proposal as a requirement on the theory that all tanks should be required to meet industry standards. A third commenter asked for clarification as to whether we intended a recommendation or a requirement.

One commenter asked that we specifically reference steel storage tank systems standards in the rule.

Response to comments. Requirement v. recommendation. The first sentence of the proposed rule indeed contemplated a requirement, i.e., that no container may be used for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage, such as pressure or temperature. The second sentence, which was clearly a recommendation, has been deleted from the rule because we have decided to remove all recommendations from the rule language. Rules are mandates, and we do not wish to confuse the regulated community as to what actions are mandatory and what actions are discretionary. The Professional Engineer must, pursuant to § 112.3(d)(1)(iii), certify that he has considered applicable industry standards in the preparation of the Plan. While he must consider such standards, use of any particular standards is a matter of good engineering practice.

Industry standards. Industry standards that may assist an owner or operator with the material and construction of containers include: (1) API Standard 620, "Design and Construction of Large Welded Low-Pressure Storage Tanks"; (2) API Standard 650, "Welded Steel Tanks for Oil Storage"; (3) Steel Tank Institute (STI) F911, "Standard for Diked Aboveground Steel Tanks"; (4) STI Publication R931, "Double Wall Aboveground Storage Tank Installation and Testing Instruction"; (5) UL Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids"; (6) UL Standard 142, "Steel Aboveground Tanks for Flammable and Combustible Liquids"; (7) UL Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; and, (8) Petroleum Equipment Institute (PEI) Recommended Practice 200, "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling."

Editorial changes and clarifications. "Bulk storage tanks" becomes "bulk storage containers." We deleted the abbreviation "etc." from the end of the paragraph because it is unnecessary. The use of the phrase "such as pressure and temperature" already indicates that these are only some examples of such conditions.

Section 112.8(c)(2)—Secondary Containment—Bulk Storage Containers

Background. In 1991, we reproposed current secondary containment requirements with several significant additions. We gave notice in the preamble (at 56 FR 54622–23) that "sufficient freeboard" is freeboard sufficient to contain precipitation from a 25-year storm event. We also proposed in rule language that diked areas must be sufficiently impervious to contain spilled oil for at least 72 hours. The current standard is that such diked areas must be "sufficiently impervious" to contain spilled oil.

Comments. Secondary containment, in general. One commenter asked for clarification of what "primary containment system" means. One commenter opposed the requirement for secondary containment on the grounds that impervious containment of a volume greater than the largest single tank may not be necessary for all tanks, and that existing facilities may find it difficult to retrofit. In this vein, another commenter asked for a phase-in of the requirements, and a third asked for variance provisions so that a facility would not have to make small additions to its secondary containment for minimum environmental benefit. Another commenter argued that the requirement should be applied to large facilities only. One commenter believed that the proposal duplicates NPDES stormwater rules. Two commenters believed the requirement should apply only to unmanned facilities. See also the comments and response to comments concerning secondary containment in the discussion of § 112.7(c), above.

Sufficient freeboard. Several commenters said that the standard of a 25-year storm event might be difficult to determine without extensive meteorological studies. Other commenters asked for clarification of the terms "sufficient" and "freeboard," or of the phrase "sufficient freeboard." Likewise, several commenters asked for clarification of the Agency's position that sufficient freeboard would be that which would withstand a 25-year storm event. Two commenters suggested a standard of 110% of tank capacity. Other commenters suggested alternatives for the 25-year storm event, such as a 24-hour, 10 year rain; or a 24-hour, 25-year storm. Another commenter suggested the adequacy of freeboard should be left flexible on a facility-specific basis.

Seventy-two-hour impermeability standard. Similar to the comments directed toward the proposed requirements for secondary containment in § 112.7(c), some commenters objected to the proposed 72-hour impermeability standard. See the comments and response to comments for § 112.7(c) above.

Response to comments. Secondary containment, in general. A primary containment system is the container or equipment in which oil is stored or used. Secondary containment is a requirement for all bulk storage facilities, large or small, manned or unmanned; and for facilities that use oil-filled equipment; whenever practicable. Such containment must at least provide for the capacity of the largest single tank with sufficient freeboard for precipitation. A discharge as described in § 112.1(b) from a small facility may be as environmentally devastating as such a discharge from a large facility, depending on the surrounding environment. Likewise, a discharge from a manned facility needs to be contained just as a discharge from an unmanned one. A phase-in of these requirements is not appropriate because secondary containment is already required under current rules. When secondary containment is not practicable, the owner or operator of a facility may deviate from the requirement under § 112.7(d), explain the rationale in the Plan, provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Because a pit used as a form of secondary containment may pose a threat to birds and wildlife, we encourage an owner or operator who uses a pit to take measures to mitigate the effect of the pit on birds and wildlife. Such measures may include netting, fences, or other means to keep birds or animals away. In some cases, pits may also cause a discharge as described in § 112.1(b). The discharge may occur when oil spills over the top of the pit or when oil seeps through the ground into groundwater, and thence to navigable waters or adjoining shorelines. Therefore, we recommend that an owner or operator not use pits in an area where such pit may prove a source of such discharges. Should the oil reach navigable waters or adjoining shorelines, it is a reportable discharge under 40 CFR 110.6.

We disagree that the rule is duplicative of NPDES rules. Forseeable or chronic point source discharges that are permitted under CWA section 402, and that are either due to causes associated with the manufacturing or

other commercial activities in which the discharger is engaged or due to the operation of treatment facilities required by the NPDES permit, are to be regulated under the NPDES program. ''Classic spill'' situations are subject to the requirements of CWA section 311. Such spills are governed by section 311 even where the discharger holds a valid and effective NPDES permit under section 402. 52 FR 10712, 10714. Therefore, the typical bulk storage facility with no permitted discharge or treatment facility would not be under the NPDES rules.

The secondary containment requirements of the rule apply to bulk storage containers and their purpose is to help prevent discharges as described in § 112.1(b) by containing discharged oil. NPDES rules, on the other hand, may at times require secondary containment, but do not always. Furthermore, NPDES rules may not always apply to bulk storage facilities. Therefore, the rule is not always duplicative of NPDES rules. Where it is duplicative, an owner or operator of a facility subject to NPDES rules may use that portion of his Best Management Practice Plan as part of his SPCC Plan.

Sufficient freeboard. An essential part of secondary containment is sufficient freeboard to contain precipitation. Whatever method you use to calculate the amount of freeboard that is ''sufficient'' must be documented in the Plan. We believe that the proper standard of ''sufficient freeboard'' to contain precipitation is that amount necessary to contain precipitation from a 25-year, 24-hour storm event. That standard allows flexibility for varying climatic conditions. It is also the standard required for certain tank systems storing or treating hazardous waste. See, for example, 40 CFR 265.1(e)(1)(ii) and (e)(2)(ii). While we believe that 25-year, 24-hour storm event standard is appropriate for most facilities and protective of the environment, we are not making it a rule standard because of the difficulty and expense for some facilities of securing recent information concerning such storm events at this time. Recent data does not exist for all areas of the United States. Furthermore, available data may be costly for small operators to secure. Should recent and inexpensive information concerning a 25-year, 24-hour storm event for any part of the United States become easily accessible, we will reconsider proposing such a standard.

Seventy-two-hour impermeability standard. As noted above, we have decided to withdraw the proposal for the 72-hour impermeability standard and retain the current standard that diked areas must be sufficiently impervious to contain oil. We take this step because we agree with commenters that the purpose of secondary containment is to contain oil from reaching waters of the United States. The rationale for the 72-hour standard was to allow time for the discovery and removal of an oil spill. We believe that an owner or operator of a facility should have flexibility in how to prevent discharges as described in § 112.1(b), and that any method of containment that achieves that end is sufficient. Should such containment fail, an owner or operator must immediately clean up any discharged oil. Similarly, we intend that the purpose of the ''sufficiently impervious'' standard is to prevent discharges as described in § 112.1(b) by ensuring that diked areas can contain oil and are sufficiently impervious to prevent such discharges.

Industry standards. Industry standards that may assist an owner or operator with secondary containment for bulk storage containers include: (1) NFPA 30, ''Flammable and Combustible Liquids Code''; (2) BOCA, National Fire Prevention Code; (3) API Standard 2610, ''Design Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities''; and, (4) Petroleum Equipment Institute Recommended Practice 200, ''Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling.''

Editorial changes and clarifications. In the first sentence, ''spill'' becomes ''discharge.'' Also in that sentence, ''contents of the largest single tank'' becomes ''capacity of the largest single container.'' This is merely a clarification and has always been the intent of the rule. The contents of a container may vary from day to day, but the capacity remains the same. In discussing capacity, we noted in the 1991 preamble that ''the oil storage capacity (emphasis added) of the equipment, however, must be included in determining the total storage capacity of the facility, which determines whether a facility is subject to the Oil Pollution Prevention regulation.'' 56 FR 54623. We discuss this capacity in the context of the general requirements for secondary containment. Thus, it is clear that we have always intended capacity to be the determinative factor in both subjecting a facility to the rule and in determining the need for secondary containment.

We also deleted the phrase ''but they may not always be appropriate'' from the third sentence of the paragraph because it is confusing when compared to the text of § 112.7(d). Under § 112.7(d), if secondary containment is not practicable, you may provide a contingency plan in your SPCC Plan and otherwise comply with that section. In the last sentence, ''plant'' becomes ''facility.'' Also in that sentence, the phrase ''so that a spill could terminate * * *'' becomes ''so that any discharge will terminate.* * *''

Section 112.8(c)(3)—Drainage of Rainwater

Background. In 1991, we reproposed the current rule on drainage of rainwater, incorporating the CWA standard, *i.e.,* ''that may be harmful,'' into the proposal.

In 1997, we proposed that records required under NPDES §§ 122.41(j)(2) and 122.41(m)(3) would suffice for purposes of this section, so that you would not have to prepare duplicate records specifically for SPCC purposes. The proposed change would also apply to records maintained regarding inspection of diked areas in onshore oil production facilities prior to drainage. *See* 112.9(b)(1).

Comments. 1991 comments. One commenter in 1991 suggested that we allow use of NPDES records for purposes of this section. Another commenter suggested that records of discharges that do not violate water quality standards are unnecessary.

1997 comments. Many commenters favored the 1997 proposal. One commenter opposed the proposal if the records were not to be required by NPDES. Specifically, the commenter sought an exemption for discharges of rainwater containing animal fats and vegetable oils if such discharges are not regulated under NPDES rules. The commenter believed that an exception should be created for reporting and recording dike bypasses of § 112.7(e)(2)(iii)(D) relating to animal fats and vegetable oil storage, only requiring such reporting and recording if required by an NPDES stormwater permit, because in all cases discharge of contaminated stormwater is not permitted. Asking why EPA should regulate stormwater bypass events if the stormwater is not contaminated, the commenter argued that if stormwater permits do not require reporting and recording of dike bypass events, then EPA should not require an added tier of regulation under SPCC Plans. Other commenters thought that EPA was adopting by reference the NPDES rules and sought clarification on the issue.

Response to comments. We agree with the first 1991 commenter mentioned above and proposed that change in 1997. We disagree with the second 1991 commenter that records of discharges

that do not violate water quality standards are unnecessary. Such records show that the facility has complied with the rule.

We are not adopting the NPDES rules for SPCC purposes, but are only offering an alternative for recordkeeping. The intent of the rule is that you may, if you choose, use the NPDES stormwater discharge records in lieu of records specifically created for SPCC purposes. We are not incorporating the NPDES requirements into our rules by reference.

This paragraph applies to discharges of rainwater from diked areas that may contain any type of oil, including animal fats and vegetable oils. The only purpose of this paragraph is to offer a recordkeeping option so that you do not have to create a duplicate set of records for SPCC purposes, when adequate records created for NPDES purposes already exist.

Editorial changes and clarifications. In the introduction to the paragraph (c)(3), ''drainage of rainwater'' becomes ''drainage of uncontaminated rainwater.'' In paragraph (c)(3)(ii), which read, ''* * * run-off rainwater ensures compliance with applicable water quality standards and will not cause a discharge as described in 40 CFR part 110'' becomes ''* * * retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).'' Also in that paragraph, we deleted the phrase ''applicable water quality standards'' because such standards are encompassed within the phrase ''a discharge as described in § 112.1(b).''

Section 112.8(c)(4)—Completely Buried Tanks; Corrosion Protection

Background. In 1991, we reproposed the current rule requiring that new completely buried metallic storage tank installations (*i.e.*, installed on or after January 10, 1974) must be protected from corrosion by coatings, cathodic protection, or effective methods compatible with local soil conditions. We recommended that such buried tanks be subjected to regular leak testing. The rationale for the recommendation was that testing technology was rapidly advancing and we wanted more information on such technology before making the recommendation a requirement. We also stated a desire to be consistent with many State rules.

Comments. Corrosion protection. One commenter supported the proposal for corrosion protection. Another thought a requirement for corrosion protection ''if soil conditions warrant'' would be unenforceable. A third commenter complained that the proposal included no discussion of cathodic protection for tank bottoms in contact with soil or fill materials. Others thought facilities with underground tanks subject to part 112 should be required to develop a corrosion protection plan consistent with 40 CFR part 280, the rules for the Underground Storage Tanks Program.

Leak testing. Several commenters opposed the proposed recommendation for leak testing, arguing that owner/operator discretion should be retained. One commenter suggested that practices for annual integrity testing and for the installation of pipes under 40 CFR part 280 should be changed from recommended practices to required practices because recommendations with standards are not usually followed.

Response to comments. Corrosion protection. We agree in principle that all completely buried tanks should have some type of corrosion protection, but as proposed, we will only extend that requirement to new completely buried metallic storage tanks. Because corrosion protection is a feature of the current rule (see § 112.7(e)(2)(iv)), the requirement applies to completely buried metallic tanks installed on or after January 10, 1974. The requirement is enforceable because it is a procedure or method to prevent the discharge of oil. See section 311(j)(1)(C) of the CWA. Most owners or operators of completely buried storage tanks will be exempted from part 112 under this rule because such tanks are subject to all of the technical requirements of 40 CFR part 280 or a State program approved under 40 CFR part 281. Those tanks subject to 40 CFR part 280 or a State program approved under 40 CFR part 281 will follow the corrosion protection provisions of that rule, which provides comparable environmental protection. Those that remain subject to the SPCC regulation must comply with this paragraph.

The rule requires corrosion protection for completely buried metallic tanks by a method compatible with local soil conditions. Local soil conditions might include fill material. The method of such corrosion protection is a question of good engineering practice which will vary from facility to facility. You should monitor such corrosion protection for effectiveness, in order to be sure that the method of protection you choose remains protective. See § 112.8(d)(1) for a discussion of corrosion protection for buried piping.

Leak testing. The current SPCC rule contains a provision calling for the ''regular pressure testing'' of buried metallic storage tanks. 40 CFR 112.7(e)(2)(iv). We proposed in 1991 a recommendation that such buried tanks be subject to regular ''leak testing.'' Proposed § 112.8(c)(4). Leak testing for purposes of this paragraph is testing to ensure liquid tightness of a container and whether it may discharge oil. We specified leak testing in the proposal, instead of pressure testing, in order to be consistent with many State regulations and because the technology on such testing was rapidly evolving. 56 FR at 54623.

We are modifying the leak testing recommendation to make it a requirement. We agree with the commenter who argued that such testing should be mandatory because recommendations may not often be followed. Appropriate methods of testing should be selected based on good engineering practice. Whatever method and schedule for testing the PE selects must be described in the Plan. Testing under the standards set out in 40 CFR part 280 or a State program approved under 40 CFR part 281 is certainly acceptable (as we suggested in the proposed rule). ''Regular testing'' means testing in accordance with industry standards or at a frequency sufficient to prevent leaks.

Editorial changes and clarifications. The first sentence of the proposed rule was deleted because it was surplus, and contained no mandatory requirements. It merely noted that completely buried metallic storage tanks represent a potential for undetected spills. ''Buried installation'' becomes ''completely buried metallic storage tank,'' to accord with the definition in § 112.2. We clarify that a ''new'' installation is one installed on or after January 10, 1974, the effective date of the SPCC rule, by deleting the word ''new'' and substituting the date. We deleted the phrase ''or other effective methods,'' because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if you explain your reasons for nonconformance, you may use alternate methods providing equivalent environmental protection.

Section 112.8(c)(5)—Partially Buried or Bunkered Tanks; Corrosion Protection

Background. In 1991, we proposed changing the current requirement to avoid using partially buried metallic tanks into a recommendation. We proposed that if you do use such tanks, that you must protect them from corrosion.

Comments. One commenter argued that the rule should only apply to new tanks.

Response to comments. Requirement v. recommendation. Due to the risk of discharge caused by corrosion, we

decided to keep the current requirement to not use partially buried metallic tanks, unless the buried section of such tanks are protected from corrosion. The requirement to not use such tanks, unless they are protected from corrosion, applies to all partially buried metallic tanks, installed at any time.

Editorial changes and clarifications. Bunkered tanks are a subset of partially buried tanks, and are included within the rule to clarify that it applies to all partially buried tanks. We did not finalize the proposed phrase ''or other effective methods,'' because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), if you explain your reasons for nonconformance, you may use alternate methods providing equivalent environmental protection. The proposed recommendation that ''partially buried or bunkered metallic tanks be avoided, since partial burial at the earth can cause rapid corrosion of metallic surfaces, especially at the earth/air interface'' becomes a requirement to ''not use partially buried or bunkered metallic tanks for the storage of oil unless you protect the buried section of the tank from corrosion.''

Section 112.8(c)(6)—Integrity Testing

Background. In 1991, we proposed that integrity testing for bulk storage tanks be conducted at least every ten years and when material repairs are conducted. We gave several examples of ''material repairs'' in the preamble. The current requirement for such testing is that it be ''periodic.'' We also proposed that visual inspection, as a method of testing, must be combined with some other method, because visual testing alone is insufficient for an integrity test. 56 FR at 54623.

In 1997, we added a proposed sentence to the rule which would allow the use of usual and customary business records for integrity testing. We suggested that records maintained under API Standards 653 and 2610 would suffice for this purpose.

Comments. 10-year integrity testing in general. One commenter asked for a clarification of the term ''integrity testing.'' Several commenters favored the proposal for ten-year integrity testing. Other commenters opposed the requirement or favored turning it into a recommendation. Several commenters proposed testing according to accepted industry standards, such as American Petroleum Institute (API), National Fire Protection Association (NFPA), Underwriters Laboratory (UL), or American Society of Mechanical Engineers (ASME).

Applicability of integrity testing. Some asked for an exemption for tanks inside buildings. Others asked for an exemption for number 5 and 6 fuel oils, and asphalt, because such oils are heavy and would not flow very far. Some commenters believed the requirement should not apply to small facilities because it is ''not standard industry practice'' to conduct these tests at small facilities. Another commenter stated that while most large corporations perform testing at some frequency, most smaller businesses do not. The commenter suggested that exemptions because of size or quantity of oil stored should not be granted because the smaller facilities generally are more in need of testing.

Several commenters suggested that integrity testing should be waived for tanks which can be visually inspected on the bottom and all sides, such as tanks located off the ground on crates, and which have secondary containment. One commenter asked that the requirement apply only when the tank is used to store corrosive materials or where the tank has failed within the last five years. Other commenters asked for a phase-in of the requirement. Utilities asked that the requirement not apply to electrical equipment because no methods exist for integrity testing of such equipment, and because the primary reason for failure of such equipment is not corrosion, but mechanical failure.

Material repairs. Several commenters asked for clarification as to the meaning of ''material repairs.''

Method of testing. Some commenters favored visual inspection only because it might be used more frequently than any other method of testing. Another commenter asked for clarification if visual inspection meant inspection of both the interior and exterior of a tank. Another commenter suggested that we augment integrity testing procedures with procedures to test the tank bottom for settlement and corrosion, and to test roof supports.

Business records. Most commenters favored the proposal to allow use of usual and customary business records for integrity testing and other purposes. Some commenters argued that the suggested API Standards were unfamiliar to many owners and operators.

Response to comments. 10-year integrity testing in general. Integrity testing is a necessary component of any good prevention plan. A number of commenters supported a requirement for such testing. It will help to prevent discharges by testing the strength and imperviousness of the container. We agree with commenters that testing according to industry standards is preferable, and thus will maintain the current standard of regularly scheduled testing instead of prescribing a particular period for testing. Industry standards may at times be more specific and more stringent than our proposed rule. For example, API Standard 653 provides specific criteria for internal inspection frequencies based on the calculated corrosion rate, rather than an arbitrary time period. API Standard 653 allows the aboveground storage tank (AST) owner or operator the flexibility to implement a number of options to identify and prevent problems which ultimately lead to a loss of tank integrity. It establishes a minimum and maximum interval between internal inspections. It requires an internal AST inspection when the estimated corrosion rate indicates the bottom will have corroded to 0.1 inches. Certain prevention measures taken to prevent a discharge from the tank bottom may affect this action level (thickness). Once this point has been reached, the owner or operator has to make a decision, depending on the future service and operating environment of the tank, to either replace the whole tank, line the bottom, add cathodic protection, replace the tank bottom with a new bottom, add a release prevention barrier, or some combination of the above.

Another benefit from the use of industry standards is that they specify when and where specific tests may and may not be used. For example, API Standard 653 is very specific as to when radiographic tests may be used and when a full hydrostatic test is required after shell repairs. Depending on shell material toughness and thickness a full hydrotest is required for certain shell repairs. Allowing a visual inspection in these cases risks a tank failure similar to the 1988 Floreffe, Pennsylvania event. Testing on a ''regular schedule'' means testing per industry standards or at a frequency sufficient to prevent discharges. Whatever schedule the PE selects must be documented in the Plan.

Applicability of integrity testing. Integrity testing is essential for all aboveground containers to help prevent discharges. Testing will show whether corrosion has reached a point where repairs or replacement of the container is needed. Prevention of discharges is preferable to cleaning them up afterwards. Therefore, it must apply to large and small containers, containers on and off the ground wherever located, and to containers storing any type of oil. From all of these containers there exists the possibility of discharge. Because electrical, operating, and manufacturing

equipment are not bulk storage containers, the requirement is inapplicable to those devices or equipment. 56 FR 54623. Also, as noted by commenters, methods may not exist for integrity testing of such devices or equipment.

Material repairs. The rationale for testing at the time material repairs are conducted is that such repairs could materially increase the potential for oil to be discharged from the tank. Examples of such repairs include removing or replacing the annular plate ring; replacement of the container bottom; jacking of a container shell; installation of a 12-inch or larger nozzle in the shell; a door sheet, tombstone replacement in the shell, or other shell repair; or, such repairs that might materially change the potential for oil to be discharged from the container.

Method of testing. The rule requires visual testing in conjunction with another method of testing, because visual testing alone is normally insufficient to measure the integrity of a container. Visual testing alone might not detect problems which could lead to container failure. For example, studies of the 1988 Ashland oil spill suggest that the tank collapse resulted from a brittle fracture in the shell of the tank. Adequate fracture toughness of the base metal of existing tanks is an important consideration in discharge prevention, especially in cold weather. Although no definitive non-destructive test exists for testing fracture toughness, had the tank been evaluated for brittle fracture, for example under API standard 653, and had the evaluation shown that the tank was at risk for brittle fracture, the owner or operator could have taken measures to repair or modify the tank's operation to prevent failure.

For certain smaller shop-built containers in which internal corrosion poses minimal risk of failure; which are inspected at least monthly; and, for which all sides are visible (*i.e.*, the container has no contact with the ground), visual inspection alone might suffice, subject to good engineering practice. In such case the owner or operator must explain in the Plan why visual integrity testing alone is sufficient, and provide equivalent environmental protection. 40 CFR 112.7(a)(2). However, containers which are in contact with the ground must be evaluated for integrity in accordance with industry standards and good engineering practice.

Business records. You may use usual and customary business records, at your option, for purposes of integrity testing recordkeeping. Specifically, you may use records maintained under API Standards 653 and 2610 for purposes of this section, if you choose. Other usual and customary business records either existing or to be developed in the future may also suffice. Or, you may elect to keep separate records for SPCC purposes. This section requires you to keep comparison records. Section 112.7(e) requires retention of these records for three years. You should note, however, that certain industry standards (for example, API Standards 570 and 653) may specify that an owner or operator maintain records for longer than three years.

Industry standards. Industry standards that may assist an owner or operator with integrity testing include: (1) API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction"; (2) API Recommended Practice 575, "Inspection of Atmospheric and Low-Pressure Tanks;" and, (3) Steel Tank Institute Standard SP001–00, "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids."

Editorial changes and clarifications. In the first sentence, "Aboveground tanks shall be subject to integrity testing * * *" becomes "Test each container for integrity * * *" Also in that sentence, the phrase "or a system of non-destructive shell testing" becomes "or another system of non-destructive shell testing." The last sentence which read, "* * * the outside of the container must be frequently observed by operating personnel for signs of deterioration, leaks, * * *" becomes "* * * you must frequently inspect the outside of the container for signs of deterioration, leaks, * * *" We made that change because the requirements of this paragraph are the responsibility of the owner or operator, not of "operating personnel."

"Integrity testing" is any means to measure the strength (structural soundness) of the container shell, bottom, and/or floor to contain oil and may include leak testing to determine whether the container will discharge oil. It includes, but is not limited to, testing foundations and supports of containers. Its scope includes both the inside and outside of the container. It also includes frequent observation of the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas.

Section 112.8(c)(7)—Leakage; Internal Heating Coils

Background. In 1991, we proposed that the current rule on controlling leakage through defective internal heating coils should be modified to include a recommendation that retention systems be designed to hold the contents of an entire tank. We also proposed to change the current requirement to consider the feasibility of installing external heating systems into a recommendation.

Comments. One commenter proposed that instead of requiring a retention system which would hold the entire contents of a tank, that an oil/water separator might work just as well. Another commenter opposed requiring the use of oil/water separators. As to the proposed recommendation to consider use of external heating systems, one commenter objected to the cost which might be incurred. One commenter opposed the proposed recommendation due to the belief that leaks in the aboveground piping can be mitigated through daily inspections and they are often placed within secondary containment. Another commenter asserted that with drainage routed to oil/water separators or holding ponds, leak proof galleys under aboveground piping were redundant and economically unjustified.

Response to comments. The rule does not mandate the use of any specific separation or retention system. Any system that achieves the purpose of the rule is acceptable. That purpose is to prevent discharges as described in § 112.1(b) by controlling leakage.

Editorial changes and clarifications. We deleted the proposed recommendations from the rule because we do not wish to confuse the regulated public as to what is mandatory and what is discretionary. We have included only requirements in the rule.

Section 112.8(c)(8)—Good Engineering Practice—Alarm Systems

Background. In 1991, we reproposed the current rule on "fail-safe" engineering. We added a proposal to allow alternate technologies. We recommended that sensing devices be tested in accordance with industry standards.

Comments. Editorial changes and clarifications. Several commenters objected to the term "fail-safe" engineering because they believe that nothing is ever fail-safe. They suggested using the term "in accordance with good engineering practice," or "consistent with accepted industry practices" instead.

Applicability. One commenter thought the proposed requirement should apply to large facilities only or facilities that were the cause of a reportable spill within the preceding three years. One commenter suggested a phase-in of the requirement.

Monitoring. One commenter suggested that a person must be present to monitor gauges when a fast response system is used to prevent container overfilling. Another suggested that the requirement for alarm devices not apply to containers where an operator is present.

Alternatives. One commenter suggested that certain ''procedures'' might suffice instead of alarm devices. Another commenter suggested that we need to be specific as to methods of testing.

Response to comments. Applicability. Alarm system devices are necessary for all facilities, large or small, to prevent discharges. Such systems alert the owner or operator to potential container overfills, which are a common cause of discharges. Because this is a requirement in the current rule, no phase-in is necessary.

Monitoring. We agree with the commenter that a person must be present to monitor a fast response system to prevent overfills and have amended the rule accordingly. We disagree that the requirement for alarm devices should not apply when a person is present, because human error, negligence, on inattention may still occur in those cases, necessitating some kind of alarm device.

Alternatives. Under the deviation rule at § 112.7(a)(2), you may substitute ''procedures'' or other measures that provide equivalent environmental protection as any of the alarm systems mandated in the rule if you can explain your reasons for nonconformance.

Industry standards. Industry standards that may assist an owner or operator with alarm systems, discharge prevention systems, and inventory control include: (1) NFPA 30, ''Flammable and Combustible Liquids Code''; (2) API Recommended Practice 2350, ''Overfill Protection for Storage Tanks in Petroleum Facilities''; and, (3) API, ''Manual of Petroleum Measurement Standards.''

Editorial changes and clarifications. Throughout, ''tank'' becomes ''container.'' In the introductory paragraph, we deleted the words ''as far as practical'' from the rule text because they are confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you may deviate from a requirement if you explain your reasons for nonconformance and provide equivalent environmental protection. ''Spills'' becomes ''discharges.'' We agree with the commenter that ''fail-safe'' engineering is inappropriate and have substituted ''in accordance with good engineering practice.'' The change in terminology does not imply any substantive change in the level of environmental protection required, it is merely editorial. Finally, in the introductory paragraph the phrase ''one or more of the following devices'' becomes ''at least one of the following.'' Not all of the items listed under this paragraph are devices. For example, regular testing of liquid sensing devices is a procedure. Therefore, the word ''devices'' was incomplete. In paragraph (i), ''manned operation'' becomes ''attended operation,'' and ''plants'' becomes ''facilities.'' In paragraph (iv), the phrase ''or their equivalent,'' was deleted because it is confusing when compared with the text of § 112.7(a)(2). Under § 112.7(a)(2), you may deviate from a requirement if you explain your reasons for nonconformance, and provide equivalent environmental protection. Proposed paragraph (v), relating to alternative technologies, was deleted because alternative devices are allowed under § 112.7(a)(2).

Section 112.8(c)(9)—Effluent Disposal Facilities

Background. In 1991, we reproposed the current rule on observation of effluent disposal facilities.

Comments. We received only one comment which asked us to clarify that ''effluents'' mean oil-contaminated water collected within secondary containment areas, and that ''disposal facilities'' means ''treatment facilities.''

Editorial changes and clarifications. ''Oil spill event'' becomes ''discharge as described in § 112.1(b).'' ''System upset'' refers to an event involving a discharge of oil-contaminated water. ''Effluent'' means oil-contaminated water. ''Disposal facilities'' becomes ''effluent treatment facilities.''

Section 112.8(c)(10)—Visible Oil Leaks

Background. In 1991, we reproposed the current requirement that visible oil leaks must be promptly corrected. Additionally, we proposed that accumulated oil or oil-contaminated materials must be removed within 72 hours. The 72-hour proposal in this paragraph was consistent with the proposal in § 112.7(c). The rationale was that a 72-hour time period would allow time for discovery and removal of an oil discharge in most cases. We suggested in the preamble to the 1991 proposal that most facilities are attended at some time within a 72-hour time period. 56 FR 54621.

Comments. Editorial changes and clarifications. One commenter asked for clarification of the meaning of ''accumulation'' of oil. Others asked for clarification of the meaning of ''oil contaminated materials.'' Another commenter noted that reference to a spill event within a diked area is inconsistent with its definition.

Applicability. Some commenters thought the requirement should not apply to small facilities because of the likelihood that the discharge would be smaller.

Extent and methods of cleanup. One commenter suggested that covering soil with plastic film may be an acceptable method to prevent stormwater contamination during remediation. Some commenters suggested that where a spill creates a risk of fire or explosion, the first priority should be to eliminate such threats before undertaking cleanup. Several commenters asked whether removal of accumulations of oil means complete removal. Some commenters feared that a requirement to remove oil-contaminated materials would be interpreted to mean that cleanup of portions of the dike that are oil-stained is required. The commenters were concerned that such a cleanup would undermine the stability of the dike and would be unnecessary. One commenter argued that complete removal would compound landfill disposal problems. Another commenter asked whether the rule contemplates cleanup of soil contaminated by past practices. Some commenters argued that the 72-hour requirement would preclude bioremediation.

72-hour cleanup standard. Some commenters asked how a 72-hour time limit would be calculated. Those commenters suggested that the clock begin to run from the time of the discharge itself, or of its discovery. Others suggested different time periods from ''immediately,'' ''as soon as possible,'' ''within 72 hours,'' ''within 96 hours,'' or ''expeditiously.'' One commenter suggested no time limit. Some commenters noted that a containment system might be designed to contain oil for more than 72 hours before it begins to leak.

One commenter suggested that, depending on site conditions, a 72-hour time limit might jeopardize worker health and safety. Another sought clarification on the need to clean up small discharges as opposed to larger ones within the proposed time limit.

Numerous commenters opposed this requirement because it might preclude bioremediation. Some thought it would be impossible to meet.

Response to comments. Applicability. The requirement to clean up an accumulation of oil is applicable to all facilities, large and small. The damage to the environment may be the same, depending on the amount discharged.

Extent of and methods of cleanup. Prevention of contamination is always the preferred alternative. If you choose, you may spread plastic film over the diked area if it will prevent the occurrence of an accumulation of oil. Of course, you must then dispose of the film properly. We agree with commenters that where a discharge creates a risk of fire or explosion, the first priority should be to eliminate such threat before undertaking cleanup. But once that threat is removed, correction of the source of the discharge and cleanup must begin promptly.

No matter what method of cleanup you choose, you must completely remove the accumulation of oil. Any method that works and complies with all other applicable laws and regulations is acceptable. Bioremediation may be one acceptable method of cleanup. Acceptable methods will depend on weather and other environmental conditions. We do not mean to limit cleanup methods, which will depend on good engineering practice. If the cleanup method you choose would undermine the stability of the dike, you must repair the dike to its previous condition.

72-hour cleanup standard. We have deleted the 72-hour cleanup standard because it would preclude bioremediation. We also agree that under certain circumstances, such a limit might jeopardize worker health and safety. Therefore, we have maintained the current standard that visible discharges must be promptly removed. ''Prompt'' removal means beginning the cleanup of any accumulation of oil immediately after discovery of the discharge, or immediately after any actions to prevent fire or explosion or other threats to worker health and safety, but such actions may not be used to unreasonably delay such efforts. The size of the accumulation is irrelevant, as any accumulation may migrate to navigable waters or adjoining shorelines.

Editorial changes and clarifications. ''Leaks'' becomes ''discharges.'' ''Tank'' becomes ''container.'' ''Accumulation of oil'' means a discharge that causes a ''film or sheen'' in a diked area, or causes a sludge or emulsion there. See 40 CFR 110.3(b). The reference to violation of applicable water quality standards in 40 CFR 110.3(b) does not apply here because the rule assumes that the oil will not have reached any waters of the United States or adjoining shorelines, but stays entirely within the diked area of the facility. The term ''oil-contaminated materials'' is not used in the rule. We eliminate the term ''oil-contaminated materials'' that was used in the proposed rule because oil must accumulate on something such as materials or soil. Therefore, the term is redundant. Instead we refer to an accumulation of oil, which includes anything on which the oil gathers or amasses within the diked area. Such accumulation may include oil-contaminated soil or any other oil-contaminated material within the diked area impairing the secondary containment system. See also the discussion of ''accumulation of oil'' included with the response to comments of § 112.9(b)(2). We have removed the term ''spill event'' from the proposed paragraph and note that we agree with the commenter who noted that reference to a ''spill event,'' or ''a discharge as described in § 112.1(b),'' within a diked area is inconsistent with that concept.

Section 112.8(c)(11)—Mobile Containers

Background. In 1991, we proposed to require that mobile tanks be positioned or located to prevent oil discharges. We recommended secondary containment for the largest single compartment or tank of any mobile container. We also recommended that these containers not be located where they will be subject to periodic flooding or washout.

Comments. Scope of discharge prevention. One commenter asked that the rule be amended to refer to discharges to navigable waters, instead of discharges.

Time limits. One commenter asked that a mobile or portable container be defined as a container which is in place on a contiguous property for 10 days or less.

Secondary containment. Two commenters supported the secondary containment proposals, but favored making them requirements instead of recommendations. One commenter asked that the secondary containment recommendation for the largest single compartment or container be modified to include tanks which are manifolded together or otherwise have overflow capabilities. Another commenter suggested that secondary containment provide freeboard sufficient to contain precipitation from a 25-year storm event.

Floods. Other commenters asked for a requirement that mobile tanks not be located in areas subject to flooding.

Response to comments. Scope of discharge prevention. We agree that the purpose of the rule is to prevent discharges from becoming discharges as described in § 112.1(b). Therefore, in response to comment, we have modified the proposed rule to require positioning or locating mobile or portable containers to prevent ''a discharge as described in § 112.1(b),'' rather than ''oil discharges.'' ''A discharge as described in § 112.1(b)'' is a more inclusive term, tracking the expanded scope of the amended CWA.

Time limits. We decline to place a time limitation in a definition of mobile or portable containers. Mobile or portable containers may be in place for more than ten days and still be mobile. Mobile containers that are in place for less than 10 days may still experience a discharge as described in § 112.1(b).

Secondary containment. In response to comments, we have maintained the secondary containment requirement in the current rule because secondary containment is necessary for mobile containers for the same reason that it is necessary for fixed containers; to prevent discharges from becoming discharges as described in § 112.1(b). Secondary containment must also be designed so that there is ample freeboard for anticipated precipitation. We have therefore amended the rule on the suggestion of a commenter to provide for freeboard. We agree with the commenter that the amount of freeboard should be sufficient to contain a 25-year storm event, but are not adopting that standard because of the difficulty and expense for some facilities in securing recent information concerning 25-year, 24-hour storm events at this time. Should that situation change, we will reconsider proposing such a standard in rule text. Freeboard sufficient to contain precipitation is freeboard according to industry standards, or in an amount that will avert a discharge as described in § 112.1(b). Should secondary containment not be practicable, you may be able to deviate from the requirement under § 112.7(d).

We clarify that the secondary containment requirement relates to the capacity of the largest single compartment or container. Permanently manifolded tanks are tanks that are designed, installed, or operated in such a manner that the multiple containers function as a single storage unit. Containers that are permanently manifolded together may count as the ''largest single compartment,'' as referenced in the rule.

Floods. We deleted the proposed recommendation on siting of mobile containers in this rule because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. These rules contain only mandatory requirements.

Industry standards. Industry standards that may assist an owner or operator with secondary containment for mobile containers include: (1) NFPA 30, ''Flammable and Combustible

Liquids Code'; and, (2) BOCA, "National Fire Prevention Code."

Editorial changes and clarifications. "Spill event" becomes "a discharge as described in § 112.1(b)." "Tank" becomes "container." We deleted the word "onshore" because the whole section applies only to onshore facilities.

Section 112.8(d)(1)—Buried Piping—Facility Transfer Operations, Pumping, and Facility Process (Onshore) (Excluding Production Facilities)

Background. In 1991, we proposed a new recommendation that all piping installations should be placed aboveground wherever possible. We added a new proposed requirement that would require protective coating and cathodic protection for new or replaced buried piping. The current rule requires such coating and cathodic protection only if soil conditions warrant. We explained in the preamble that we believe that all soil conditions warrant protection of buried piping. We did not propose to make the requirement applicable to all existing piping because of the significant possibility that replacing all unprotected buried piping might cause more discharges than it would prevent. If soil conditions warrant such protection for existing piping, it is already required by the current rule. We also proposed a new recommendation that buried piping installation comply to the extent possible with all the relevant provisions of 40 CFR part 280.

Comments. Aboveground piping recommendation. Two commenters favored the recommendation. Others requested that it be modified to have all piping be aboveground only when appropriate, on the theory that some aboveground piping may become an obstacle to motorized traffic within a facility, or may be a hazard to worker safety because of the possibility of tripping over it.

Corrosion protection. Several commenters supported the proposal to require corrosion protection for all new or replaced buried piping. One commenter believed that corrosion protection should be required, as in the current rule, only where soil conditions warrant. One commenter asked for clarification that the requirement for replaced piping only applies to the section replaced, not necessarily to the entire line of piping. Another commenter believed that corrosion protection was inadequate to protect from discharges, and urged a requirement for double-walled piping or secondary containment and product sensitive leak detection for new facilities. One commenter believed that the recommendation for buried piping installation to comply with 40 CFR part 280 should be a requirement, not a recommendation.

Response to comments. Aboveground piping recommendation. While we have deleted the proposed recommendation from the rule text because we do not wish to confuse the regulated public over what is mandatory and what is discretionary, we still believe that piping should be placed aboveground whenever possible because such placement makes it easier to detect discharges. The decision to place piping aboveground might include consideration of safety and traffic factors.

Corrosion protection. Based on EPA experience, we believe that all soil conditions warrant protection of new and replaced buried piping. EPA's cause of release study indicates that the operational piping portion of an underground storage tank system is twice as likely as the tank portion to be the source of a discharge. Piping failures are caused equally by poor workmanship and corrosion. Metal areas made active by threading have a high propensity to corrode if not coated and cathodically protected. See 53 FR 37082, 37127, September 23, 1988; and "Causes of Release from US Systems," September 1987, EPA 510-R–92–702. If you decide to deviate from the requirement, for example, to provide an alternate means of protection other than coating or cathodic protection, you may do so, but must explain your reasons for nonconformance, and demonstrate that you are providing equivalent environmental protection. A deviation which seeks to avoid coating or cathodic protection, or some alternate means of buried piping protection, on the grounds that the soil is somehow incompatible with such measure(s), will not be acceptable to EPA.

A "new" or "replaced" buried piping installation is one that is installed 30 days or more after the date of publication of this rule in the **Federal Register**. We have deleted the words "new" and "replaced" from the proposed language and substituted this specific date so the effective date is clearer to the regulated community. Under the current rule, you have an obligation to provide buried piping installations with protective wrapping and coating only if soil conditions warrant such measures. Under the revised rule, you must provide such wrapping and coating for new or replaced buried piping installations regardless of soil conditions.

You should consult a corrosion professional before design, installation, or repair of any corrosion protection system. Any corrosion protection you provide should be installed according to relevant industry standards. When piping is replaced, you must protect from corrosion only the replaced section, although protection of the entire line whenever possible is preferable. Equipping only a small portion of piping with corrosion protection may accelerate corrosion rates on connected unprotected piping. While we agree that corrosion protection might not prevent all discharges from buried piping, it is an important measure because it will help to prevent most discharges.

Double-walled piping or secondary containment or sensitive leak detection for buried piping may be acceptable as a deviation from the requirements of this paragraph under § 112.7(a)(2) if you explain your reasons for nonconformance with the requirement and show that the means you selected provides equivalent environmental protection to the requirement. However, we will not require such measures because we did not propose them.

We have deleted the recommendation from the proposed rule that all buried piping installations comply to the extent practicable with 40 CFR part 280, because we are excluding recommendations from this rule to avoid confusion with what is mandatory and what is discretionary. Also, some buried piping now subject to part 112 will be subject only to 40 CFR part 280 or a State program approved under 40 CFR part 281 under this rule. See § 112.1(d)(4).

Industry standards. Industry standards that may assist an owner or operator with corrosion protection for buried piping installations include: (1) National Association of Corrosion Engineers (NACE) Recommended Practice-0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems"; and, (2) STI Recommended Practice 892, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems."

Editorial changes and clarifications. In the second sentence of paragraph (d)(1), we included a reference to "a State program approved under part 281 of this chapter." In the third sentence, "examine" and "examination" become "inspect" and "inspection."

Section 112.8(d)(2)—Terminal Connections

Background. In 1991, we proposed that when piping is not in service or is in standby service for 6 months or more, the terminal connection at the transfer point must be capped or blank-flanged and marked as to origin. The current rule requires such capping or blank-flanging when the piping is not in service or is in standby service ''for an extended time.''

Comments. One commenter supported the six-month clarification of an ''extended time.'' Several commenters opposed the requirement to cap or blank-flange piping in standby service because such piping may be needed to be put into service quickly during an emergency to ensure safe operations at the facility. The commenter suggested that the rule be reworded to say ''When piping is not in service or is not in standby service.''

Response to comments. We have decided to keep the current standard of requiring capping or blank-flanging terminal connections when such piping is not in service or is in standby for an extended time in order to maintain flexibility for variable facilities and engineering conditions. We define ''an extended time'' in reference to industry standards or at a frequency sufficient to prevent discharges. We disagree with commenters that the requirement should not apply to piping that is not in standby service because some discharges may be caused by loading or unloading oil through the wrong piping or turning the wrong valve when the piping in question was actually out-of-service. Typically, piping that is in standby service is only needed in emergency situations or when there is an operational problem. In the rare situations when such piping is needed immediately, the owner or operator may remove the cap or blank-flange to return the piping to service.

Editorial changes and clarifications. ''Examine'' becomes ''inspect.''

Section 112.8(d)(3)—Pipe Supports

Background. In 1991, we reproposed without substantive change the current rule concerning pipe supports.

Comments. We received no comments on this proposal. Therefore, we have promulgated the provision as proposed.

Section 112.8(d)(4)—Inspection of Aboveground Valves and Piping

Background. In 1991, we proposed that you examine all aboveground valves, piping, and appurtenances on at least a monthly basis. This contrasts with the current requirement of ''regular'' examinations. We also recommended that you conduct annual integrity and leak testing of buried piping, or that you monitor it on a monthly basis. Finally, we recommended that all valves, pipes, and appurtenances conform to relevant industry codes, such as ASME standards. We proposed deletion from the rule of the current requirement for periodic pressure testing for piping where facility drainage is such that a failure might lead to a spill event.

Comments. Monthly examination of aboveground valves, piping, and appurtenances. One commenter supported the visual monthly examination proposal, but suggested that we require a more sophisticated method of testing every three to four years, such as pressure testing. Most other commenters opposed monthly examinations, on grounds of impracticality. Most opposing commenters urged testing on a quarterly or semiannual basis, or per industry standards. Some thought the requirement should be a recommendation, both for large and small facilities. Electrical utility commenters asserted that the monthly testing of millions of pieces of equipment would be extremely burdensome. Several commenters urged that the examination requirement be limited to visual examination because of the cost of other methods.

Buried piping. Several commenters favored the proposed recommendation for annual integrity and leak testing of buried piping or monitoring of such piping on a monthly basis. One commenter was concerned that the recommendation made no concession for piping construction material, length of time in the ground, etc. Several commenters believed that the recommendation should be a requirement because piping often runs outside of secondary containment; buried piping cannot be inspected visually; discharges are common from this piping; and few owners or operators conduct integrity or leak testing of such piping. Some thought it should be a requirement for all facilities, others just for large facilities. One commenter thought that the requirement to inspect buried piping only when exposed is inadequate. The commenter suggested that the piping should be subject to pressure testing. The frequency of the testing would be based on aquifer use.

Opposing commenters believed annual testing or monthly monitoring was unnecessary, generally citing cost and practicability reasons. Some suggested differing time periods for testing, such as every three years, or every ten years. One commenter believed that the recommendation should not apply to piping of less than ten feet. Others asked for clarification as to the type of testing contemplated. One commenter suggested that the recommendation be clarified to refer only to oil-handling piping and equipment, and not include buried piping unrelated to oil operations. Several commenters suggested that we add a requirement to the rule to conduct integrity and leak testing of protected piping at the time of installation, modification, construction, relocation, or replacement, and to conduct an engineering evaluation of in-service unprotected underground piping every five years. Another commenter suggested double-walled piping as an alternative. One commenter suggested that the recommendation was inappropriate for vaulted tanks because of the configuration of the tanks.

Response to comments. Monthly inspection of aboveground valves, piping, and appurtenances. Inspection of aboveground valves, piping, and appurtenances must be a requirement to help prevent discharges. Such valves, piping, and appurtenances often are located outside of secondary containment systems, and often do not have double-wall protection or some form of secondary containment themselves. Therefore, any discharge from such valves, piping, and appurtenances is more likely to become a discharge as described in § 112.1(b). Examination of discharge reports from the Emergency Response Notification System (ERNS) shows that discharges from such valves, piping, and appurtenances are much more common than catastrophic tank failure or discharges from tanks. The requirement must be applicable to large and small facilities covered by this section that store oil, because of the same threat of discharge.

The requirements of this paragraph do not apply to electrical utilities and other facilities with oil-filled equipment because they are not bulk storage facilities.

The final rule maintains the current standard of ''regular'' inspections, on the suggestion of commenters who noted that at some remote sites monthly inspections are impractical, especially in harsh weather conditions. Furthermore, we agree with commenters that ''regular'' inspections are inspections conducted ''in accordance with accepted industry standards,'' rather than the monthly proposed standard. You must include appurtenances in the inspection. Inspections may be either visual or by

other means, including pressure testing. However, we do not require pressure testing or any other specific method. We agree that, subject to good engineering practice, pressure testing every three or four years may be warranted in addition to regular inspection of aboveground valves, piping, and appurtenances. However, we believe that regular inspection is sufficient to help prevent discharges and will not impose any additional requirements at this time.

Buried piping. We have deleted the text of the proposed recommendation to conduct annual integrity and leak testing of buried piping or monitor buried piping on a monthly basis from the rule because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. This rule contains only mandatory requirements. However, we continue to endorse the recommendation as a discretionary action, and suggest that you conduct such testing according to industry standards.

We agree with a commenter that the proposed recommendation would apply only to "oil-handling" piping and valves, not all such piping and valves, which may be unrelated to oil activities. However, no change in rule text is necessary because the entire rule applies only to procedures, methods, or equipment that are involved with the storage or use of oil. In response to the commenter who urged that the proposed recommendation not apply to buried piping of less than 10 feet in length, we believe that any buried piping, regardless of length, may cause a discharge, and therefore should be tested. Double-walled piping might be an acceptable alternative to integrity and leak testing or monthly monitoring. If you choose double-walled piping as an alternative, you must explain your nonconformance with the rule requirements, and explain how double-walled piping provides equivalent environmental protection. See 112.7(a)(2).

On the suggestion of commenters, we have modified the proposed recommendation for annual testing or monthly monitoring of buried piping into a requirement that you must only conduct integrity and leak testing of such piping at the time of installation, modification, construction, relocation, or replacement. We believe that when piping is exposed for any reason, integrity and leak testing of such exposed piping according to industry standards is appropriate because piping is visible at that point, and testing is easier because the piping is more accessible. The same commenters also recommended that unprotected underground piping be subject to engineering evaluations every five years, but we recommend such evaluations be conducted in accordance with industry standards to preserve flexibility in case the time frame changes with changing technology.

If you have vaulted containers, the requirement for integrity and leak testing of buried piping might be the subject of a deviation under § 112.7(a)(2) if those pipes, valves, and fittings come out of the top of the container and are not buried, or are encased in a double-walled piping system and you thereby significantly reduce the potential for corrosion.

Likewise, we have deleted from rule text the recommendation that all valves, pipes, and appurtenances conform to industry standards, but we endorse its substance.

Industry standards. Industry standards that may assist an owner or operator with inspection and testing of valves, piping, and appurtenances include: (1) API Standard 570, "Piping Inspection Code (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems"; (2) API Recommended Practice 574, "Inspection Practices for Piping System Components"; (3) American Society of Mechanical Engineers (ASME) B31.3, "Process Piping"; and, (4) ASME B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols."

Editorial changes and clarifications. "Examine" and "examination" become "inspect" and "inspection." We have deleted the reference to "operating personnel" in the first sentence because all of the requirements of this rule, except when specifically noted otherwise, are the responsibility of the owner or operator.

Section 112.8(d)(5)—Vehicular Traffic

Background. In 1991, we reproposed the current rule concerning warnings to vehicular traffic, because of vehicle size, to avoid endangering aboveground piping. We proposed to amend the rule to include avoidance of endangering "other transfer operations" within the scope of the warning. We added a recommendation that weight restrictions should be posted, as applicable, to prevent damage to underground piping.

Comments. Vehicular warnings. Several commenters supported the current requirement to warn vehicular traffic to avoid endangering aboveground piping or other transfer operations because of vehicle size. Others believed that any size or weight restrictions would unnecessarily burden facility operations. See the comments below on weight restrictions. Some believed the proposed requirement should be a recommendation based on good engineering practices. One thought it made no difference. One commenter proposed as an alternative, marking such piping so it could be temporarily protected or avoided. One commenter suggested that it would be more prudent to require signs where piping is lower than 14 feet and located such that vehicles can traverse, and recommended that, in addition to signs, verbal warnings be provided.

Weight restriction posting. Several commenters supported making this recommendation a requirement because good engineering practice will exclude heavy equipment from crossing buried piping which does not have adequate cover to protect the pipe.

Others opposed it on the grounds it would restrict access to vehicles which "have driven over the same piping for a dozen or more years." One commenter thought the recommendation was unnecessary because local building codes or other standards already address the issue of buried piping protection. Some thought the recommendation should be a matter of PE discretion. Several commenters thought that the recommendation should apply to large facilities only because only large facilities will have the type of tanker trucks on site which would potentially damage underground piping. One commenter thought that small facilities should be exempt from the recommendation.

Another commenter believed that the recommendation should be restricted to situations where it is not certain that the underground piping can withstand all anticipated vehicular traffic. Another commenter suggested that if buried piping is placed across a thoroughfare, it should be installed with additional structural protection. The commenter asserted that proper installation is a preventative and is a better alternative than a sign because signs are not always heeded.

One commenter suggested that posting of weight restrictions at airports in open areas would be impractical and impact operations. The commenter argued that the proposal was unreasonable where some buried piping/hydrant systems run under ramp surfaces. A railroad commenter argued that the recommendation is overly broad because railroads have a large amount of piping under track that is built to withstand maximum loads from vehicular traffic, making the posting of signs unnecessary and costly. One commenter argued that the requirement was inapplicable to vaulted tanks

because the concrete vault reduced the risk of vehicular damage.

Response to comments. Vehicular warnings. The requirement to warn vehicular traffic so that no vehicle will endanger aboveground piping or other oil transfer operations applies to all facilities, large or small, because vehicular traffic may endanger aboveground piping or other transfer operations at all facilities. Warnings may include verbal warnings, signs, or marking and temporary protection of piping or equipment. No particular height restriction is incorporated into the rule. Rather, aboveground piping at any height must be protected from vehicular traffic unless the piping is so high that all vehicular traffic passes underneath the piping. In this case, or where the requirement is infeasible, you may be able to use the deviation provision in § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection. We have deleted the clause concerning the size of vehicles that may endanger piping or oil transfer operations because the owner or operator may not be able to determine precisely when the size or weight of a vehicle would cause such endangerment.

In response to commenters who suggested that the posting of signs is impractical and might impact operations, or would be very costly, we note that you may deviate from the requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Weight restriction posting. We deleted the proposed recommendation concerning weight restrictions as they relate to underground piping from rule text, but still support it when appropriate. We include only mandatory items in this rule because we do not wish to confuse the regulated public as to what is mandatory and what is discretionary. We decline to make the recommendation a requirement because we believe the appropriate posting of weight restrictions should be a matter of good engineering practice.

Editorial changes and clarifications. We deleted the references to verbal warning or appropriate signs in the rule. Instead, the rule contains an obligation to warn entering vehicular traffic. Warnings may be verbal, by signs, or by other appropriate methods.

Introduction to Section 112.9

Background. We have added an introduction to help rewrite the section in the active voice. Since the owner or operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.9(a)—General Requirements—Onshore Oil Production Facilities

Background. This is a new provision that merely references the general requirements which all facilities must meet as well as the specific requirements that you must meet if you are an owner or operator of a facility in the category of onshore oil production facilities.

Editorial changes and clarifications. The obligation to "address" general SPCC requirements becomes the obligation to "meet" those requirements. "Spill prevention" becomes "discharge prevention." We also deleted the word "onshore" from the titles of the paragraphs of this section because the entire section applies only to onshore production facilities.

Proposed Section 112.9(b)—Definition—Onshore Oil Production Facilities

Background. This proposed section was merely a reference to the old definition of onshore oil production facility (*see* current § 112.7(e)(5)(i)), which is today incorporated within the new definition of production facility. Therefore, the section is no longer necessary and we have deleted it.

Section 112.9(b)(1), Proposed as § 112.9(c)(1)—Dike Drains and Drainage

Background. In 1991, we reproposed the current rule concerning drainage of diked areas.

Comments. Editorial changes and clarifications. One commenter suggested an editorial change from discharges to "navigable waters," to a discharge as referenced in § 112.1(b)(1).

Applicability. Another commenter urged a small facility exemption from this requirement because the recordkeeping involved was too burdensome.

Engineering methods. One commenter believed that the requirement to have all drains closed on dikes around storage containers might preclude engineering methods designed to handle flow-through conditions at water flood oil production operations, where large volumes of water may be directed to oil storage tanks if water discharge lines on oil-water separators become plugged.

Response to comments. Applicability. We believe that this requirement must be applicable to both large and small facilities to help prevent discharges as described in § 112.1(b). The risk of such a discharge and the accompanying environmental damage may be devastating whether it comes from a large or small facility. We disagree that the recordkeeping is burdensome. If you are an NPDES permittee, you may use the stormwater drainage records required pursuant to 40 CFR 122.41(j)(2) and 122.41(m)(3) for SPCC purposes, thereby reducing the recordkeeping burden.

Engineering methods. "Equivalent" measures referenced in the rule might, depending on good engineering practice, include using structures such as stand pipes designed to handle flow-through conditions at water flood oil production operations, where large volumes of water may be directed to oil storage tanks if water discharge lines on oil-water separators become plugged. Any alternate measures must provide environmental protection equivalent to the rule requirement.

Industry standards. Industry standards that may assist an owner or operator with facility drainage include API Recommended Practice 51, "Onshore Oil and Gas Production Practices for Protection of the Environment."

Editorial changes and clarifications. In response to the commenter's suggestion, the reference to "navigable waters" becomes a reference to "a discharge as described in § 112.1(b)." "Central treating stations" becomes "separation and treating areas." Such areas might be centrally located or located elsewhere at the facility and might include both separation and treatment devices and equipment. The reference to "rainwater is being drained" becomes "draining uncontaminated rainwater." We clarify that accumulated oil on rainwater must be disposed of in accord with "legally approved methods," not "approved methods."

Section 112.9(b)(2)—Proposed as § 112.9(c)(2)—Drainage Ditches, Accumulations of Oil

Background. In 1991, we sought to clarify that oil as well as oil-contaminated soil must be removed from field drainage ditches, road ditches, and the like. The current rule only requires removal of an "accumulation of oil." We also proposed that such accumulations be removed within 72 hours at the most.

Comments. Applicability. One commenter asserted that this section does not apply to crude oil transfers from production fields into tank trucks because any discharges in the transfer process would be caught in a small

sump or catchment basin. Another commenter asked if this section applied to cleanup of oil and oil-contaminated soil from diked areas.

Inspection schedule. Another commenter suggested that we require inspections of field drainage ditches, etc., at monthly intervals and within 24 hours of a 25-year storm event.

Accumulations of oil and oil-contaminated soil. Two commenters argued that EPA lacks authority to require cleanup of contaminated soil. Others asked for clarifications of the terms "accumulation" and "oil-contaminated soil." Another asked what cleanup standard EPA contemplated under this rule. The commenter elaborated, "is accumulated oil and contaminated soil to be removed from diked areas under this provision?"

72-hour cleanup standard. Several commenters argued that the 72-hour standard for cleanup would preclude bioremediation or other cleanup techniques allowed by State and local law. Several commenters suggested other time periods, including "as soon as practical," "within a timely manner." Some suggested no time standard is appropriate. Those commenters generally thought that a 72-hour period might be unrealistic in certain cases.

Response to comments. Applicability. Crude oil transfers from production fields into tank trucks or cars are covered by the general requirements contained in § 112.7(c) and (h), both of which require some form of secondary containment. Cleanup of oil, oil-contaminated soil, and oil-contaminated materials from field drainage ditches, road ditches, or other field drainage system is covered by this paragraph. In response to comment, we note that cleanup of oil from diked areas at onshore production facilities is not specifically covered by the rules. However, the presence of oil in diked areas may impair the quality of the dike or the capacity for secondary containment, and if so, the oil must be removed.

Inspection schedule. We have retained the "regularly scheduled intervals" standard for inspections. This standard means regular inspections according to industry standards or on a schedule sufficient to prevent a discharge as described in § 112.1(b). Whatever schedule for inspections is selected must be documented in the Plan. We decline to specify a specific interval because such an interval might become obsolete with changing technology.

Accumulations of oil and oil-contaminated soil. We have adequate authority to require cleanup of an accumulation of oil, including on soil and other materials, because section 311(j)(1)(C) of the CWA provides EPA with the authority to establish procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil. The broad definition of "oil" in CWA section 311(a)(1) covers "oil refuse" and "oil mixed with wastes other than dredged spoil." If field drainage systems allow the accumulation of oil on the soil or other materials at the onshore facility and that oil threatens navigable water or adjoining shorelines, then EPA has authority to establish a method or procedure, i.e., the removal of oil contaminated soil, to prevent that oil from becoming a discharge as described in § 112.1(b). The cleanup standard under this paragraph requires the complete removal of the contaminated oil, soil, or other materials, either by removal, or by bioremediation, or in any other effective, environmentally sound manner.

72-hour cleanup standard. We agree that the 72-hour cleanup standard might preclude bioremediation and have therefore deleted it. Instead we establish a standard of "prompt cleanup." "Prompt" cleanup means beginning the cleanup immediately after discovery of the discharge or immediately after any actions necessary to prevent fire or explosion or other imminent threats to worker health and safety.

Editorial changes and clarifications. "Escaped from small leaks" becomes "resulted from any small discharge." We eliminate the term "oil-contaminated soil" because oil must accumulate on something, such as materials or soil. We retain the term "accumulation of oil," but elaborate on its meaning. "Accumulation of oil" means a discharge that causes a "film or sheen" within the field drainage system, or causes a sludge or emulsion there (*see* 40 CFR 110.3(b)). An accumulation of oil includes anything on which the oil gathers or amasses within the field drainage system. An accumulation of oil may include oil-contaminated soil or any other oil-contaminated material within the field drainage system. *See also* the discussion of "accumulation of oil" included with the response to comments of § 112.8(c)(10).

Proposed Section 112.9(c)(3)—Additional Requirements for Flood Events

Background. In 1991, we proposed a new recommendation for oil production facilities in areas subject to flooding. We recommended that the Plan address additional precautionary measures related to flooding. In the discussion of the proposal, we referenced FEMA requirements.

Comments. One commenter thought this provision should be a requirement rather than a recommendation. Another commenter suggested that exploration and production facilities located in flood plain areas should be adequately secured through proper mechanical/engineering methods to reduce the chance of loss of product. A third commenter suggested the following specific measures to be implemented: (1) Identify whether the facility is located in a floodplain in the Plan; (2) if the facility is located in a floodplain, the Plan should address to what extent it meets the minimum requirements of the National Flood Insurance Program (NFIP); and (3) if a facility does not meet the minimum requirements of the NFIP, the Plan should address appropriate precautionary and mitigation measures for potential flood-related discharges.

Response to comments. We have deleted the recommendation because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. These rules contain only mandatory requirements. However, we support the substance of the recommendation, and suggest that a facility in an area prone to flooding either follow the requirements of the NFIP or employ other methods based on good engineering practice to minimize damage to the facility from a flood.

Section 112.9(c)(1)—Proposed as § 112.9(d)(1)—Materials and Construction—Bulk Storage Containers

Background. In 1991, we reproposed the section on materials and construction of bulk storage containers with an added recommendation that containers conform to relevant industry standards.

Comments. One commenter thought that the recommendation for use of industry standards should be a requirement. The commenter asked that at a date certain, all existing tanks must be upgraded to current standards, and that all new and reconstructed tanks must be subject to applicable codes. Another commenter suggested that the recommendation should not apply to crude oil storage tanks because local industry standards are more appropriate.

Response to comments. Recommendation v. requirement. We are retaining the mandatory requirement to use no container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage, as proposed. We have deleted the recommendation that materials, installation, and use of

new tanks conform with relevant portions of industry standards because we do not wish to confuse the regulated public over what is mandatory and what is discretionary. However, we endorse its substance. In most cases good engineering practice and liability concerns will prompt the use of industry standards. See § 112.3(d)(1)(iii). In addition, a requirement is not necessary or desirable because local governmental standards on construction, materials, and installation sometimes control industry standards on these matters.

Industry standards. Industry standards that may assist an owner or operator with materials for and construction of onshore bulk storage production facilities include: (1) API Specification 12B, ''Bolted Tanks for Storage of Production Liquids''; (2) API Specification 12D, ''Field Welded Tanks for Storage of Production Liquids''; (3) API Specification 12F, ''Shop Welded Tanks for Storage of Production Liquids''; (4) API Specification 12J, ''Oil Gas Separators''; (5) API Specification 12K, ''Indirect-Type Oil Field Heaters''; and, (6) API Specification 12L, ''Vertical and Horizontal Emulsion Treaters.''

Editorial changes and clarifications. ''Tank'' becomes ''container.''

Section 112.9(c)(2)—Proposed as § 112.9(d)(2)—Secondary Containment, Drainage

Background. The SPCC Task force concluded that aboveground storage tanks without secondary containment pose a particularly significant threat to the environment. We noted that the proposed rule modifications would ''retain the current requirement for facility owners or operators who are unable to provide certain structures or equipment for oil spill prevention, including secondary containment, to prepare facility-specific contingency plans in lieu of prevention systems.'' 56 FR 54614. In 1991, we therefore reproposed the secondary containment requirements for onshore oil production facilities with a clarification. We clarified that secondary containment must include sufficient freeboard to allow for precipitation. The current rule requires that drainage from undiked areas must be safely confined in a catchment basin or holding pond. The proposed rule had modified this requirement to apply only to drainage from undiked areas ''showing a potential for contamination.''

Comments. Secondary containment. See the discussion under § 112.7(c) of secondary containment in general. One commenter suggested that the requirement was too vague and comprehensive to be applied to oil leases, which might cover hundreds of acres. Another asked how we would determine what is sufficient freeboard.

Drainage. One commenter thought the drainage requirement was duplicative of NPDES requirements.

Response to comments. Secondary containment. The requirement applies to oil leases of any size. Secondary containment is not required for the entire leased area, merely for the contents of the largest single container in the tank battery, separation, and treating facility installation, with sufficient freeboard to contain precipitation. In response to the comment as to how an owner or operator might determine how much freeboard is sufficient, we have revised the rule to provide that freeboard sufficient to contain precipitation is the standard. Freeboard sufficient to contain precipitation is freeboard installed according to industry standards, or in an amount sufficient to avert a discharge as described in § 112.1(b). This standard is consistent with the amount of freeboard required in § 112.8(c)(2).

Drainage. We deleted the proposed reference to undiked areas ''showing a potential for contamination'' because drainage from any undiked area poses a threat of contamination. When drainage from such areas is covered by stormwater discharge permits, that part of the BMP might be usable for SPCC purposes. There is no redundancy in recordkeeping requirements, because you can use your NPDES records for SPCC purposes.

Industry standards. Industry standards that may assist an owner or operator with secondary containment at onshore production facilities include: (1) API Recommended Practice 51, ''Onshore Oil and Gas Production Practices for Protection of the Environment''; (2) NFPA 30, ''Flammable and Combustible Liquids Code''; and, (3) BOCA, ''National Fire Prevention Code.''

Editorial changes and clarifications. ''Tank battery and central treating plant installations'' becomes ''tank battery, separation, and treating facility installations.'' ''Contents of the largest single tank'' becomes ''capacity of the largest single container.'' With this change, this paragraph agrees with general secondary containment requirements found in § 112.7(c). The reference to tanks ''in use'' was deleted because it is redundant. Containment for tanks or containers that are not permanently closed is already required. We deleted the phrase ''if feasible, or alternate systems, such as those outlined in § 112.7(c)(1),'' because it is confusing when compared to the text of § 112.7(d). Under § 112.7(d), if secondary containment is not practicable, you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with the requirements of § 112.7(d). Furthermore, you are also free to provide alternate systems of secondary containment. We do not prescribe the method.

Section 112.9(c)(3)—Proposed as § 112.9(d)(3)—Container Inspection

Background. In 1991, we proposed that you must visually examine all containers of oil at onshore production facilities at least once a year. The current requirement is that you examine these containers ''on a scheduled periodic basis.'' We also proposed that you would be required to maintain the schedule and records of those examinations for a period of five years, irrespective of changes in ownership.

Comments. Frequency of inspection. One commenter favored the proposal. One commenter suggested quarterly rather than annual inspections. Two commenters suggested triennial inspections. Other commenters suggested a frequency in accordance with API recommended standards.

Extent of inspection. Several commenters thought that the inspections should be external only, and should not necessarily include the foundations and supports (as proposed) because of the number of containers that would be taken out of service with that requirement. Another commenter asserted that inspection of foundations and supports might not be possible due to foundation settlement or lack of space to perform the inspection.

Response to comments. Frequency of inspection. We have maintained the current standard for frequency of inspection because we agree that inspections in accordance with industry standards are necessary. Those standards may change with changing technology, therefore, a frequency of ''periodically and upon a regular schedule'' preserves maximum flexibility and upholds statutory intent.

Extent of inspection. We disagree that the inspection of containers should be limited to external inspection. Internal inspection is also necessary to detect possible flaws that could cause a discharge. The inspection must also include foundations and supports that are on or above the surface of the ground. If for some reason it is not practicable to inspect the foundations and supports, you may deviate from the requirement under § 112.7(a)(2), if you explain your rationale for

nonconformance and provide equivalent environmental protection.

Record maintenance. We have deleted the proposed requirement to maintain records of these inspections for five years, irrespective of ownership, because it is redundant with the general requirement in § 112.7(e) to maintain Plan records. Section 112.7(e) requires record maintenance for three years. However, you should note that certain industry standards (for example, API Standard 653 or API Recommended Practice 12R1) may specify that an owner or operator maintain records for longer than three years.

Industry standards. Industry standards that may assist an owner or operator with inspection of containers at onshore production facilities include: (1) API Recommended Practice 12R1, "Recommended Practice for Setting, Maintenance, Inspection, Operation, and Repair of Tanks in Production Service"; and, (2) "API Standard 653, "Tank Inspection, Repair, Alteration, and Reconstruction."

Editorial changes and clarifications. "Visually examine" becomes "Visually inspect." "All tanks" becomes "each container." "Foundation and supports of tanks above the ground surface" becomes "Foundation and support of each container that is on or above the surface of the ground."

Section 112.9(c)(4)—Proposed as § 112.9(d)(4)—Good Engineering Practice

Background. In 1991, we proposed to convert the current requirement for "fail-safe" engineering (which includes vacuum protection and other measures) of new and old tank battery installations into a recommendation. We also proposed that you reference appropriate industry standards.

Comments. One commenter asserted that we should retain the original requirement to avoid confusion among the regulated community, help improve spill prevention, and because we proposed a similar requirement for bulk storage containers. Another commenter opposed the proposed recommendation because he believed the cost of such engineering would be prohibitive. Two commenters sought an exemption for small facilities on the same rationale. Similarly, some commenters opposed the proposed recommendation on vacuum protection because of the potential cost. None of the commenters provided their own cost estimates. Some commenters opposed the proposed recommendation relating to vacuum protection because of the potential cost, which they estimated as "in excess of $100 per tank."

Response to comments. Good engineering practice. We agree with the commenter that we should retain this section as a requirement both to improve spill prevention and to avoid confusion among the regulated community because of the similar requirement for bulk storage containers at facilities other than production facilities. Therefore, there are no new costs. Nevertheless, you have flexibility as to which measures you use, and may choose the least expensive alternative listed in § 112.9(c)(4). For example, should vacuum protection be too costly, you are free to use another alternative. Furthermore, you may also deviate from the requirement under § 112.7(a)(2) if you can explain nonconformance and provide equivalent environmental protection by some other means. We revised the paragraph on vacuum protection to clarify that the rule addresses any type of transfer from the tank, not merely a pipeline run.

Industry standards. Industry standards that may assist an owner or operator with alarm systems include: (1) API, "Manual of Petroleum Measurement Standards"; (2) API Recommended Practice 51, "Onshore Oil and Gas Production Practices for Protection of the Environment"; (3) API Recommended Practice 2350, "Overfill Protection for Storage Tanks in Petroleum Facilities"; and, (4) NFPA 30, "Flammable and Combustible Liquids Code."

Editorial changes and clarifications. "Fail-safe" engineering becomes "good engineering practice," because fail-safe engineering is a misnomer. The change in terminology does not imply any substantive change in the level of environmental protection required, it is merely editorial. See the comments, and the discussion under "Editorial changes and clarification," § 112.8(c)(8). The same reasoning applies to this paragraph. We deleted the phrase "as far as is practical," because it is confusing when compared to the text of § 112.7(a)(2). Under § 112.7(a)(2), you may explain your reasons for nonconformance, and provide equivalent environmental protection by some other means. We deleted the recommendation to reference appropriate industry standards because it was unnecessary. You must discuss actual standards used in the Plan. Section 112.3(d)(1)(iii) also requires the Professional Engineer to certify that he has considered applicable industry standards in the preparation of the Plan. Also in the introductory paragraph, the phrase "Consideration shall be given to providing.* * *" becomes, "You must provide.* * *" This change makes the language consistent with a companion paragraph dealing with good engineering design, *i.e.*, § 112.8(c)(8). In paragraph (c)(4)(i), "regular rounds" becomes "regularly scheduled rounds." "Spills" becomes "discharges." In paragraph (c)(4)(iv), the phrase "where facilities are" becomes "where the facility is." Elsewhere "tank" becomes "container."

Section 112.9(d)(1)—Proposed as § 112.9(e)(1)—Inspection of Aboveground Valves and Piping

Background. In 1991, we proposed that you inspect monthly all aboveground valves and pipelines, and that you maintain records of such inspections for five years. The current requirement is that you examine such valves and pipelines "periodically on a scheduled basis," and maintain the records of such inspections for three years.

Comments. Editorial changes and clarifications. One commenter asked for clarifying language that the rule only applied to valves and piping associated with transfer operations.

Applicability. Two commenters asked for an exemption from the requirements of this paragraph for small facilities.

Frequency of inspections. Several commenters suggested alternate inspection intervals, such as every six months, or every year. Another commenter suggested that monthly inspections are meaningless because some unscrupulous operators might fill out inspection reports on dates when no problems are to be found. Other commenters suggested that we require a performance standard instead of a prescribed monthly inspection. One commenter suggested the proposed inspections standards for § 112.9(e) were excessive for many small facilities. The commenter suggested that a standard defined by the licensed Professional Engineer who certifies the SPCC Plan could reflect the differing requirements that may apply under different equipment configurations as well as differing geographical and meteorological conditions. The commenter added that a generalized performance standard should be included that includes a minimum inspection interval, such as annual inspection, which could be altered to meet specific facility conditions.

Recordkeeping. One commenter thought a five-year record retention period is excessive. Another commenter asked that we clarify that PE certification of these regular inspections and records is not required.

Response to comments. Applicability. The rule must apply equally to large and

small facilities because failure to inspect piping and valves at any facility might lead to a discharge as described in § 112.1(b).

Frequency of inspections. We have retained the current inspection frequency of periodic inspections, but editorially changed it to "upon a regular schedule." Our decision accords with the comment which sought a performance standard instead of a prescribed monthly inspection. The standard of inspections "upon a regular schedule" means in accordance with industry standards or at a frequency sufficient to prevent discharges as described in § 112.1(b). Whatever frequency of inspections is selected must be documented in the Plan.

Recordkeeping. We agree that a five-year record retention period is longer than necessary and have deleted the proposed requirement in favor of the general requirement in § 112.7(e) to maintain records for three years. However, comparison records for compliance with certain industry standards may require an owner or operator to maintain records for longer than three years. PE certification of these inspections and records is not required.

Editorial changes and clarifications. "Examine" becomes "inspect." We agree with the commenter who asked for clarification that the rule applies only to inspections related to transfer operations and have amended the rule to reflect that. A transfer operation is one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car, or other storage, equipment, or device.

Section 112.9(d)(2)—Proposed as § 112.9(e)(2)—Salt Water Disposal Facilities

Background. In 1991, we reproposed without change the current requirements on the examination of salt water (oil field brine) disposal facilities. The current requirement is that you examine these facilities "often." However, we have recommended weekly examination as an appropriate engineering standard for most facilities. 56 FR 54624. We noted that low temperature conditions, sudden temperature changes, or periods of low flow rates may require more frequent inspections.

Comments. Applicability. One commenter suggested that the requirement to examine these facilities should not apply to storage facilities with de minimis amounts of oil.

Sudden change in temperature. Another commenter asked for clarification of what "a sudden change in temperature" means. The commenter assumed that it meant a sudden drop that could cause system upsets.

Response to comments. Applicability. The rule applies to any regulated facility with salt water disposal if the potential exists to discharge oil in amounts that may be harmful, as defined in 40 CFR 110.3. This standard is necessary to protect the environment.

Sudden change in temperature. A sudden change in temperature means any abrupt change in temperature, either up or down, which could cause system upsets.

Frequency of inspections. Inspections of these facilities must be conducted "often." "Often" means in accordance with industry standards, or more frequently, if as noted, conditions warrant. Whatever frequency of inspections is chosen must be documented in the Plan.

Editorial changes and clarifications. "Examine" becomes "inspect." "Oil discharge" becomes "discharge," because the term "oil" is redundant in the definition of "discharge."

Section 112.9(d)(3)—Proposed as § 112.9(e)(3)—Flowline Maintenance

Background. In 1991, we reproposed the current requirements for flowline maintenance. We proposed a recommendation, rather than a requirement, that the program include certain specifics, because of differences in the circumstances of locations, staffing, and design for production facilities. We suggested that monthly examinations are appropriate for most facilities.

Comments. Applicability. Two commenters asked for a small facility exemption for this recommendation.

Frequency of inspections. Several commenters suggested that the recommendation refer to periodic instead of monthly examinations. Others suggested annual or quarterly inspections. One commenter said that monthly inspection of gathering lines buried in the colder parts of the Appalachian basin is impossible.

Corrosion protection. Several commenters asserted that the provision for corrosion protection for the bare steel pipe used for gathering line systems in the Appalachians is impossible because the cost of coated lines and cathodic protection is prohibitive. None of the commenters provided their own cost estimates.

Transfer operation. One commenter asked for clarification of the term "oil production facility transfer operation." The commenter suggested that a definition of the term would improve compliance.

Response to comments. Applicability. A program of flowline maintenance is necessary to prevent discharges both at large and small facilities. However, we have deleted the proposed recommendation regarding the specifics of the program from the rule. We took this action because we are not including recommendations in the rule in order not to confuse the public over what is mandatory and what is discretionary. This rule contains only mandatory requirements.

Frequency of inspections. In the proposed recommendation we suggested that you conduct monthly inspections for a flowline maintenance program. We now recommend that you conduct inspections either according to industry standards or at a frequency sufficient to prevent a discharge as described in § 112.1(b). Under § 112.3(d)(1)(iii), the Professional Engineer must certify that the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards.

Corrosion protection, flowline replacement. While we have deleted the recommendation from rule text due to reasons explained above and therefore, the rule imposes no new costs, we recommend corrosion protection, we recommend corrosion protection, and flowline replacement when necessary, because those measures help to prevent discharges as described in § 112.1(b).

Transfer operation. A transfer operation is one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car, or other storage, equipment, or device.

Editorial changes and clarifications. "Spills" becomes "discharges." The phrase "from this source" becomes "from each flowline."

Section 112.10—Introduction—Onshore Oil Drilling and Workover Facilities

Background. This paragraph is a new one, not proposed in 1991, but editorially added to allow us to rewrite the section in the active voice. Since the owner or operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.10(a)—General and Specific Requirements

Background. This is a new paragraph that merely references the general

requirements which all facilities must meet as well as the specific requirements that facilities in this category must meet.

Comments. One commenter asked for a definition of "onshore drilling and workover facilities."

Editorial changes and clarifications. The new definition for "production facility" in § 112.2 includes the procedures, methods, and equipment referenced in this section, making a definition of "onshore drilling and workover facilities" unnecessary. "Spill prevention" becomes "discharge prevention." To "address" requirements becomes to "meet" requirements.

Section 112.10(b)—Mobile Facilities

Background. In 1991, we reproposed the current rule on the location of mobile facilities without substantive change.

Comments. Editorial changes and clarifications. One commenter asked that the requirement be limited to discharges to navigable waters.

Site location. One commenter opposed the requirement on the location of mobile facilities because the facility contractor has absolutely no control over the location of the rig unit. The commenter added that the contractor is instructed by the site owner/operator where to place the rig unit generally, and the sites are where oil and gas are expected to be located. The physical location of the well site is constructed by and maintained by the owner/operator of the lease. The contractor has no input as to site design nor responsibility for its maintenance.

Response to comments. Site location. We agree with the commenter that the contractor is not normally responsible for site location, nor site design or maintenance. Such decisions are the responsibility of the facility owner or operator. The owner or operator of the facility has the responsibility to locate equipment so as to prevent discharges as described in § 112.1(b).

Editorial changes and clarifications. The applicable limitation on discharges in the rule tracks the statute. The commenters requested that discharges be limited to discharges to "navigable waters." However, the correct scope of discharge prevention is not merely navigable waters, but the entire range of protected resources described in § 112.1(b). We therefore use the phrase "a discharge as described in § 112.1(b)."

Section 112.10(c)—Secondary Containment—Catchment Basins or Diversion Structures

Background. In 1991, we reproposed without substantive change the current requirements for secondary containment. We received no comments on the proposal. Therefore, we have promulgated it as proposed, with minor editorial changes.

Industry standards. Industry standards that may assist an owner or operator with secondary containment at onshore oil drilling and workover facilities include: (1) API Recommended Practice 52, "Land Drilling Practices for Protection of the Environment"; (2) NFPA 30, "Flammable and Combustible Liquids Code"; and, (3) BOCA, "National Fire Prevention Code."

Editorial changes and clarifications. "Spills" becomes "discharges." The words "depending on the location" were deleted because they were confusing when compared with the text of § 112.7(d). If a catchment basin or diversion structure or other form of secondary containment is not practicable from the standpoint of good engineering practice, under § 112.7(d) you must provide a contingency plan following the provisions of 40 CFR part 109, and otherwise comply with § 112.7(d).

Section 112.10(d)—Blowout Prevention (BOP)

Background. In 1991, we proposed that blowout prevention (BOP) assembly would only be required "when necessary." The rationale was that a BOP assembly is not necessary where pressure is not great enough to cause a blowout (gauge negative) and is not required in all cases. We noted that the necessity of BOP assembly hinges on the "history of the pressures encountered when drilling on the oil reservoir." When that history is unknown, BOP assembly is required.

Comments. Several commenters urged modification of the rule to exclude well service jobs that may not need BOP assembly, such as the installation of a rod pumping unit, or the batch treatment of a well with corrosion inhibitor.

Response to comments. Service jobs. Where BOP assembly is not necessary, as for certain routine service jobs, such as the installation of a rod pumping unit, or the batch treatment of a well with corrosion inhibitor, you may deviate from the requirement under § 112.7(a)(2), and explain its absence in the Plan. When BOP assembly is unnecessary because pressures are not great enough to cause a blowout, it is likewise unnecessary to provide equivalent environmental protection.

Industry standards. Industry standards that may assist an owner or operator with blowout prevention assembly include: (1) API Recommended Practice 16E, "Design of Control Systems for Drilling Well Control Equipment"; (2) API Recommended Practice 53, "Blowout Prevention Equipment Systems for Drilling Operations"; (3) API Specification 16A, "Drill Through Equipment"; and, (4) API Specification 16D, "Control Systems for Drilling Well Control Equipment."

Editorial changes and clarifications. We deleted the phrase "as necessary" from the requirement, because it is confusing when compared to the text of § 112.7(a)(2). When BOP assembly is unnecessary and therefore no alternate measure is required, you may deviate from the requirement under § 112.7(a)(2) if you explain your reasons for nonconformance. We have deleted as surplus the last sentence of the rule requiring that casing and BOP installations must be in accordance with State regulatory requirements. Adherence to State regulatory requirements is mandatory under State law in any case. The phrase "is expected to be encountered" becomes "may be encountered."

Section 112.11—Introduction—Offshore Oil Drilling, Production, or Workover Facilities

Background. We added an introduction as an editorial device to allow us to rewrite the section in the active voice. Because the owner or operator is the person with responsibility to implement a Plan, the mandates of the rule are properly addressed to him, except as specifically noted.

Section 112.11(a)—General and Specific Requirements—Offshore Oil Drilling, Production, or Workover Facilities

Background. This is a new paragraph that merely references the general requirements which all facilities must meet as well as the specific requirements that facilities in this category must meet.

Comments. State rules. One commenter thought § 112.11 should be deleted because current State rules provide adequate spill protection in inland water areas such as lakes, rivers, and wetlands.

Response to comments. State rules. We disagree with the commenter that these rules are unnecessary because not every State has rules to protect offshore drilling, production, and workover facilities. While some States may have rules, some State rules may not be as stringent as the Federal rules. In any case, Congress has intended us to establish a nationwide Federal program to protect the environment from the

dangers of discharges as described in § 112.1(b) posed by this class of facilities. Therefore, we have retained the section, as modified. We note, however, that if you have a State SPCC plan or other regulatory document acceptable to the Regional Administrator that meets all Federal SPCC requirements, you may use it as an SPCC Plan if you cross reference the State or other requirements to the Federal requirement. If it meets only some, but not all Federal SPCC requirements, you must supplement it so that it meets all of the SPCC requirements.

Editorial changes and clarifications. ''Spill prevention'' becomes ''discharge prevention.'' The obligation to ''address'' requirements and procedures becomes the obligation to ''meet'' them.

Proposed Section 112.11(b)—Definition Reference; MMS Jurisdiction

Background. The proposed 1991 section referenced the definition of ''offshore oil drilling, production, and workover facility,'' which is now encompassed within the definition of ''production facility'' in § 112.2. A new sentence would have referenced the exemption of facilities subject to Minerals Management Service (MMS) Operating Orders, notices, and regulations from the SPCC rule. MMS jurisdiction is outlined in Appendix B to part 112.

Comments. One commenter suggested that we delete the reference to the proposed definition and to the applicability section.

Response to comments. We agree. Since none of the proposed language is mandatory, we have deleted it because we have included only mandates in this rule so as not to confuse the regulated public over what is required and what is discretionary.

Section 112.11(b)—Proposed as § 112.11(c)—Facility Drainage

Background. In 1991, we reproposed the current section on facility drainage with the modification to require removal of collected material at least once a year. The rationale was to prevent a buildup of accumulated oils. We noted that a protracted removal period could lead to an accidental excess buildup and resultant overflow.

Comments. Two commenters recommended deletion of the proposed requirement to remove collected oil as often as necessary, but at least once a year, because the current requirement is sufficient.

Response to comments. Removal of collected oil. EPA agrees with the commenter's suggestion that the current rule is sufficient to prevent discharges as described in § 112.1(b), and therefore we have deleted the ''at least once a year'' standard. You must remove collected oil as often as is necessary to prevent such discharges.

Editorial changes and clarifications. ''Discharging oil as described in § 112.1(b)(1)'' becomes ''having a discharge as described in § 112.1(b).'' In the second sentence, we deleted the phrase ''or equivalent collection system sufficient,'' because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance, and provide equivalent environmental protection.

Section 112.11(c)—Proposed as § 112.11(d)—Sump Systems

Background. In 1991, we proposed to clarify language in current rule that a regularly scheduled maintenance program is a monthly preventive maintenance program.

Comments. Frequency of inspections. One commenter recommended that a semi-annual inspection and testing program of the liquid removal system, instead of monthly inspection and testing would be preferable.

Response to comments. Frequency of inspections. We have retained the current rule language requiring a ''regularly scheduled'' preventive maintenance program because we believe that the frequency of maintenance should be in accordance with industry standards or frequently enough to prevent a discharge as described in § 112.1(b). Whatever schedule is chosen must be documented in the Plan.

Editorial changes and clarifications. We deleted the phrase ''or equivalent method'' from the first sentence because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(d)—Proposed as § 112.11(e)—Discharge Prevention Systems for Separators and Treaters

Background. In 1991, we reproposed without substantive change the current rule on discharge prevention systems for separators and treaters. We received no comments.

Editorial changes and clarifications. ''Escape'' of oil becomes ''discharge'' of oil. ''Oil discharges'' becomes ''discharge of oil.'' We deleted the phrase from the last sentence which allows ''using other feasible alternatives to prevent oil discharges,'' because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(e)—Proposed as § 112.11(f)—Atmospheric Storage or Surge Containers; Alarms

Background. In 1991, we reproposed without substantive change the current paragraph on alarm systems for atmospheric storage or surge containers. We received no comments. Therefore, we have promulgated the rule as proposed, with only minor editorial changes.

Editorial changes and clarifications. ''Oil discharges'' becomes ''discharges.'' We added the words ''that activate an alarm or control the flow'' to clarify that these activities, along with ''otherwise'' controlling discharges, are the purpose of the sensing devices we reference in the paragraph. The phrase ''to activate'' becomes ''that activate,'' and we add the word ''otherwise'' before ''prevent discharges.'' We deleted the phrase ''or other acceptable alternatives,'' because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(f)—Proposed as § 112.11(g)—Pressure Containers; Alarm Systems

Background. In 1991, we reproposed the current rule concerning pressure tanks without substantive change. We received no comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. ''Tanks'' becomes ''containers.'' ''Oil discharges'' becomes ''discharges.'' We deleted the phrase ''or with other acceptable alternatives to prevent discharges,'' because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(g)—Proposed as § 112.11(h)—Corrosion Protection

Background. In 1991, we reproposed the current paragraph requiring corrosion protection for containers at facilities subject to this section. We added a recommendation that you follow National Association of

Corrosion Engineers standards for corrosion protection.

Comments. Industry standards. One commenter suggested that we remove the last sentence, which is advisory, and addresses industry standards of the National Association of Corrosion Engineers, or make it a requirement (at least for new construction). Another commenter suggested that the rule be modified to incorporate other industry recommended practices relative to corrosion control, such as those of STI and API. The commenter specifically recommended STI Recommended Practice R892–89, "Recommended Practice for Corrosion Protection of Underground Steel Piping Associated with Underground Storage and Dispensing Systems," and STI Recommended Practice 893–89, "Recommended Practice for External Corrosion of Shop Fabricated Aboveground Steel Storage Tank Floors."

Response to comments. Industry standards. In response to the comment, we have deleted the recommendation because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. These rules contain only mandatory requirements. We expect that facilities will follow industry standards for corrosion protection as well as other matters (*see* § 112.3(d)(iii)), but decline to prescribe particular standards in the rule text because those standards are subject to change, and we will not incorporate a potentially obsolescent standard into the rules.

Industry standards. Industry standards suggested by a commenter that may assist an owner or operator with corrosion include: (1) National Association of Corrosion Engineer standards; (2) STI Recommended Practice R892, "Recommended Practice for Corrosion Protection of Underground Steel Piping Associated with Underground Storage and Dispensing Systems," and, (3) STI Recommended Practice 893, "Recommended Practice for External Corrosion of Shop Fabricated Aboveground Steel Storage Tank Floors."

Editorial changes and clarifications. "Tanks" becomes "containers."

Section 112.11(h)—Proposed as § 112.11(i)—Pollution Prevention System Procedures

Background. In 1991, we reproposed without substantive change the current requirements concerning written procedures for inspecting and testing pollution prevention equipment and systems. We received no substantive comments. Therefore, we have promulgated the rule as proposed with minor editorial changes.

Editorial changes and clarifications. "As part of the SPCC Plan" becomes "within the Plan."

Section 112.11(i)—Proposed as § 112.11(j)—Pollution Prevention Systems; Testing and Inspection

Background. In 1991, we reproposed the current rule on testing and inspection of pollution prevention systems. Additionally, we proposed that simulated spill testing must be the preferred method to test and inspect oil spill prevention equipment and systems. We also proposed that pollution prevention systems must be tested at least monthly. The current standard calls for testing and inspection "on a scheduled periodic basis."

Comments. Some commenters suggested that simulation testing on a monthly basis is excessive. Commenters suggested instead testing on a semi-annual or annual basis.

Response to comments. Frequency of testing. We have retained the current requirement for testing on a "scheduled periodic basis" commensurate with conditions at the facility because we believe that testing should follow industry standards or be conducted at a frequency sufficient enough to prevent a discharge as described in § 112.1(b) rather than any prescribed time frame. Whatever frequency is chosen must be documented in the Plan.

Editorial changes and clarifications. In the first sentence, "or other appropriate regulations" becomes "and any other appropriate regulations." In the second sentence, "spill testing" becomes "simulated discharges for testing." We have deleted from the last sentence the phrase "unless the owner or operator demonstrates that another method provides equivalent alternative protection" because it is confusing when compared to the text of § 112.7(a)(2). You may deviate from a requirement under § 112.7(a)(2) if you explain your reasons for nonconformance and provide equivalent environmental protection.

Section 112.11(j)—Proposed as § 112.11(k)—Surface and Subsurface Well Shut-in Valves and Devices

Background. In 1991, we reproposed the current section concerning surface and subsurface well shut-in valves and devices. We proposed an additional requirement that records for each well must be kept for five years. We received no substantive comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. In today's rule, we kept the recordkeeping requirement, but deleted language requiring maintenance of those records for five years. The effect of the deletion is that records become subject to the general three-year recordkeeping requirement. *See* § 112.7(e). You may keep the records as part of the Plan or may keep them with the Plan.

Section 112.11(k)—Proposed as § 112.11(l)—Blowout Prevention

Background. In 1991, we reproposed the current rule concerning blowout prevention without substantive change.

Comments. One commenter suggested that there are occasions when blowout prevention is not warranted or impractical to implement and that there should be an exception for drilling below conductor casing.

Response to comments. Alternatives. The question of whether blowout prevention is warranted or impractical or not for drilling below conductor casing is one of good engineering practice. Acceptable alternatives may be permissible under the rule permitting deviations (§ 112.7(a)(2)) when the owner or operator states the reasons for nonconformance and provides equivalent environmental protection.

Industry standards. Industry standards that may assist an owner or operator with offshore blowout prevention assembly and well control systems include: (1) API Recommended Practice 16E, "Design of Control Systems for Drilling Well Control Equipment"; (2) API Recommended Practice 53, "Blowout Prevention Equipment Systems for Drilling Operations"; (3) API Specification 16A, "Drill Through Equipment"; (4) API Specification 16C, "Choke and Kill Systems"; and, (5) API Specification 16D, "Control Systems for Drilling Well Control Equipment."

Editorial changes and clarifications. "BOP preventor assembly" becomes "BOP assembly." We deleted the last sentence of the paragraph referring to adherence to State rules because we are not incorporating State rules into the SPCC rule and adherence to State rules is required under State law whether we state it or not. The phrase "expected to be encountered" becomes "may be encountered."

Proposed § 112.11(m)—Extraordinary Well Control Measures

Background. In 1991, we proposed to change the current requirements on extraordinary well control measures for emergency conditions to recommendations. The rationale was

that we would review these measures in the context of response planning.

Comments. One commenter suggested that the paragraph should be deleted because it is advisory, or made a requirement.

Response to comments. In response to comment, we have deleted the text of the recommendations from the rules because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. However, we endorse its substance. This rule contains only mandatory requirements.

Section 112.11(l)—Proposed as § 112.11(n)—Manifolds

Background. In 1991, we reproposed the current requirements concerning manifolds without substantive change. We received no comments on the proposal. Therefore, we have promulgated the rule as proposed.

Section 112.11(m)—Proposed as § 112.11(o)—Flowlines, Pressure Sensing Devices

Background. In 1991, we reproposed the current requirements concerning pressure sensing devices and shut-in valves for flowlines without substantive change. We received no comments on the proposal. Therefore, we have promulgated the rule as proposed.

Section 112.11(n)—Proposed as § 112.11(p)—Piping; Corrosion Protection

Background. In 1991, we reproposed the current requirements concerning corrosion protection for piping appurtenant to the facility without substantive change. We also proposed to change into a recommendation the current requirement that the method used, such as protective coatings or cathodic protection, be discussed.

Comments. One commenter suggested that we remove the second sentence, which is advisory.

Response to comments. In response to comment, we have deleted the recommendation to discuss the method of corrosion protection, because it is surplus. In your SPCC Plan, you must discuss the method of corrosion protection you use. See 112.7(a)(1).

Section 112.11(o)—Proposed as § 112.11(q)—Sub-Marine Piping; Environmental Stresses

Background. In 1991, we reproposed the current requirements concerning environmental stress against sub-marine piping appurtenant to facilities without substantive change. We received no comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. We have rewritten the rule in the active voice. We also deleted the proposed recommendation because this rule contains only mandatory items, and because the recommendation is redundant. Whatever manner of protection is chosen to protect sub-marine piping must be discussed in the Plan.

Section 112.11(p)—Proposed as § 112.11(r)—Inspections of Sub-Marine Piping

Background. In 1991, we reproposed the current requirements concerning the inspection of sub-marine piping appurtenant to facilities without substantive change. We received no comments. Therefore, we have promulgated the rule as proposed, with minor editorial changes.

Editorial changes and clarifications. The proposal to require maintenance of records for five years was deleted because under § 112.7(e) of today's rule, all records must be kept for three years. We clarify that you must inspect or test the piping. Because visual inspection of sub-marine piping may not always be possible, we allow testing as an alternative. We encourage inspection or testing pursuant to industry standards or at a frequency sufficient to prevent a discharge as described in § 112.1(b). Whatever inspection schedule you select must be documented in the Plan.

Proposed § 112.11(s)—Written Instructions for Contractors

Background. In 1991, we proposed to change into a recommendation the current requirement that you prepare written instructions for contractors and subcontractors whenever contract activities involve servicing a well, or systems appurtenant to a well or pressure vessel. The current rule requires that you keep the instructions at the facility. We note in the proposed rule that under certain circumstances, you may require the presence of your representative at the facility to intervene when necessary to prevent a discharge as described in § 112.1(b).

Comments. One commenter wrote that the proposal creates two serious problems. First, that since the contractor is hired to perform special services, he is able to do his work more safely if he is allowed to direct his own activities. Second, operators might expose themselves to various types of liability by virtue of the degree of control exercised over contractors. A second commenter suggested editorial revisions to the recommendation, and subsequent sentences.

Response to comments. We have decided to delete the proposed recommendation because we do not wish to confuse the regulated community over what is mandatory and what is discretionary. This rule contains only mandatory requirements.

Subparts C and D

Background. In 1995, Congress enacted the Edible Oil Regulatory Reform Act (EORRA), 33 U.S.C. 2720. That statute mandates that most Federal agencies differentiate between and establish separate classes for various types of oils, specifically: animal fats and oils and greases, fish and marine mammal oils; oils of vegetable origin; and, other oils and greases, including petroleum and other non-petroleum oils. In differentiating between these classes of oils, Federal agencies are directed to consider differences in the physical, chemical, biological, and other properties, and in the environmental effects, of the classes.

In 1991, EPA proposed to reorganize the SPCC rule based on facility type. The rationale for that reorganization is to clarify SPCC Plan requirements for different types of facilities. While we have reorganized the rule to provide requirements for different types of facilities, we also provide requirements for different types of oil in this rulemaking. To make this change, we have divided the rule into subparts. Subpart A consists of an applicability section, definitions, and general requirements for all facilities. Subparts B and C outline the requirements for different types of oils. Subpart B is for petroleum oils and non-petroleum oils, except for animal fats and vegetable oils. Subpart C is for animal fats and oils and greases, and fish and marine mammal oils; and for vegetable oils, including oils from seeds, nuts, fruits, and kernels. Subpart D is for response. Subparts B and C are divided into sections to reflect the differing types of facilities for each type of oil. Subpart D is for response requirements.

Therefore, as noted above, we have divided the requirements of the rule by subparts for the various classes of oils listed in EORRA. Because at the present time EPA has not proposed differentiated requirements for public notice and comment, the requirements for facilities storing or using all classes of oil will remain the same. However, we have published an advance notice of proposed rulemaking seeking comments on how we might differentiate requirements for facilities storing or using the various classes of oil. 64 FR

17227, April 8, 1999. After considering these comments, if there is adequate justification for differentiation, we will propose a rule.

Proposed § 112.20(f)(4)—Capacity of Facilities Storing Process Water/Wastewater for Response Plan Purposes

Background. In 1997, we proposed to add a new paragraph to § 112.20(f) to provide a method for facility response plan purposes to calculate the oil storage capacity of storage containers storing a mixture of process water/wastewater with 10% or less of oil. This proposal for certain systems that treat process water/wastewater would be applicable at certain facilities required to prepare a facility response plan. It would have no effect on facilities required to prepare response plans because they transfer oil over water and have a total oil storage capacity greater than or equal to 42,000 gallons. Likewise, the proposal would have no effect on the method of calculating capacity for purposes of SPCC Plans. Under the proposal, we would not count the entire capacity of process water/wastewater containers with 10% or less of oil in the capacity calculation to determine whether a facility must prepare a facility response plan. We only would count the oil portion of that process water/wastewater contained in § 112.20(f)(2), and therefore response planning is not necessary.

Today, we are withdrawing the proposal because it is no longer necessary. It is unnecessary because we have exempted from part 112 any facility or part thereof (except at oil production, oil recovery, and oil recycling facilities) used exclusively for wastewater treatment and not to satisfy any requirement of part 112. See the discussion under § 112.1(d)(6). The exemption in § 112.1(d)(6) applies to the types of facilities treating wastewater that would have been allowed to calculate a reduced storage capacity if the percentage of oil in the mixture were 10 percent or less.

Section 112.20(h)—Facility Response Plan Format

Background. In 1997, we proposed to amend the requirements for formatting of a facility response plan to clarify that an Integrated Contingency Plan (ICP) or other plan format acceptable to the Regional Administrator is allowable to serve as a facility response plan if it meets all facility response plan requirements. Our intent was to track language in the SPCC rule allowing the Regional Administrator similar authority to accept differing formats for SPCC Plans. However, the Regional Administrator already has the authority to accept differing formats for response plans, and the existing facility response plan requirements already provide for cross-referencing. *See* § 112.20(h). Therefore, new rule language was unnecessary, and the proposal tracked current language. Today, we have made only a minor editorial change in rule language.

Comments. Acceptable formats. Most commenters favored the proposal. One commenter suggested that the rule should specifically mention the ICP. Another requested that State FRP equivalents be accepted. Several commenters criticized the proposal; one calling the ICP concept ''over-rated.'' One commenter thought that the rule makes the ICP mandatory. Another commenter noted that the proposed rule is identical to the current rule.

Partially acceptable formats. One commenter asked if an operator would have to integrate all parts of an ICP with a response plan or if he would have the option to integrate parts of the ICP with the SPCC Plan.

PE certification. One commenter asked how an ICP would work, i.e., whether the PE would be certifying the SPCC portion, the FRP portion, or both.

Response to comments. Acceptable formats. It is not necessary for the rule to mention the ICP or any other format specifically because the rule already allows the Regional Administrator flexibility to accept any format that meets all Federal requirements. *See* § 112.20(h). You may use the ICP, a State response plan, or other format acceptable to the Regional Administrator, at your option. We do not require use of any alternative format, but merely give you the option to do so.

The commenter is correct that the proposed rule is identical to the current rule. The current rule allows the submission of an ''equivalent response plan that has been prepared to meet State or other Federal requirements.''

Partially acceptable formats. You have the option to integrate any or all parts of an ICP with your response plan. This gives you flexibility in formatting. Similar to SPCC Plans, the Regional Administrator may accept partial use of alternative formats.

PE certification. PE certification is only required for the SPCC portion of any ICP.

Editorial changes and clarifications. We added the words ''acceptable to the Regional Administrator'' in the first sentence after the words ''response plan.''

Appendix C—Substantial Harm Criteria

Background. In 1997, we proposed changes to Appendix C which would track proposed amendments to § 112.20(f)(4) regarding calculating the oil storage capacity of aboveground storage containers storing a mixture of process water/wastewater within 10% or less of oil. Because we have withdrawn the proposed changes to § 112.20(f)(4), the proposed changes to Appendix C are also unnecessary. Therefore, we have withdrawn the proposed changes to Appendix C, and it remains unchanged.

Appendix C—Section 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 Transfer of Oil

Background. We have corrected the text of the first sentence in the section to correspond with the title, so that it reads ''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. We added the words ''or equal to'' to track rule language found at § 112.20(f)(1)(i).

Appendix C—Section 2.4—Proximity to Public Drinking Water Intakes at Facilities With a Total Oil Storage Capacity Greater Than or Equal to 1 Million Gallons

Background. We have revised the title of this section by reversing the order of the words ''Storage'' and ''Oil'' in the heading. We have also added the word ''oil'' to the first sentence so that it reads, ''A facility with a total oil storage capacity greater than * * *.''

Appendix D—Part A—Section A.2 (Footnote 2)

Background. We have revised footnote 2 to section A.2 of Part A, Appendix D, to reflect the new citation to the SPCC rule's secondary containment requirements.

Appendix F—Section 1.2.7—NAICS Codes

Background. We have revised section 1.2.7 to delete the reference to Standard Industry Classification (SIC) codes, and replace it with a reference to North American Industry Classification System (NAICS) codes. The NAICS was adopted by the United States, Canada, and Mexico on January 1, 1997 to replace the SIC codes.

Appendix F—Section 1.4.3 Analysis of the Potential for an Oil Discharge

Background. We have revised the second and last sentences of this section by replacing the word "spill" with "discharge."

Appendix F—Section 1.7.3 (7)—Containment and Drainage Planning

Background. We have revised paragraph (7) of section 1.7.3 of Appendix F to use the new citation to the SPCC rule's inspection and monitoring requirements for drainage.

Appendix F—Section 1.8.1 Facility Self-Inspection

Background. We have revised section 1.8.1 of Appendix F to use the new citation to the SPCC rule's recordkeeping requirements. The revision also reflects the three-year record maintenance periods for SPCC records and keeps the current five-year period for FRP records.

Editorial changes and clarifications. "Tanks" becomes "each container."

Appendix F—Section 1.8.1.1—Tank Inspection

Background. We have revised section 1.8.1.1 of Appendix F to use the new citation to the SPCC rule's tank inspection requirements.

Appendix F—Section 1.8.1.3 Secondary Containment Inspection

Background. We have revised section 1.8.1.1.4 of Appendix F to use the new citation to the SPCC rule's secondary containment inspection requirements.

Appendix F—Section 1.10 Security

Background. We have revised section 1.10 of Appendix F to use the new citation to the SPCC rule's security requirements.

Appendix F—Section 2.1(6) General Information

Background. We have revised paragraph 2.1(6) to refer to NAICS codes in place of SIC codes.

Appendix F—Section 3.0 Acronyms

Background. We have deleted the acronym for SIC and substituted the acronym for NAICS.

Appendix F-Attachment F–1 Response Plan Cover Sheet

Background. We have deleted the reference to SIC and substituted a reference to NAICS.

VI. Summary of Supporting Analyses

A. Executive Order 12866—OMB Review

Under Executive Order 12866, (58 FR 51735, October 4, 1993), the Agency must determine whether a regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Under the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action" because it raises novel legal or policy issues. Such issues include proposed measures which would relieve facilities of regulatory mandates and could change the manner in which facilities comply with remaining mandates. Therefore, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

The reduction in size of the regulated community due to final rule revisions will lead to a capital cost savings of approximately $29.47 million per year. During the first year, regulated facilities will experience an increase in total paperwork cost burden of $21.93 million due primarily to the need to read the rule. In addition, certain facilities will recalculate their storage capacity to exclude applicable wastewater treatment systems and, therefore, must amend and certify their plans if the storage capacity threshold is still met. In certain cases, however, the wastewater treatment system provision in section 112.1(b)(6) will result in a facility no longer being subject to the any Part 112 requirements. However, during the second year, total paperwork cost burden will decrease by about $60.21 million and beginning in the third year following the rulemaking, the total paperwork cost burden to all regulated facilities will decrease by about $45.03 million. The result is an aggregate cost savings of about $7.56 million during the first year, $89.69 million during the second year, and $74.51 million during subsequent years.

B. Executive Order 12898—Environmental Justice

Executive Order 12898 requires that each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations. EPA has determined that the regulatory changes in this rule will not have a disproportionate impact on minorities and low-income populations.

C. Executive Order 13045—Children's Health

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866; and, (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under Section 5–501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The Agency has no data that indicate that the types of risks resulting from oil discharges have a disproportionate effect on children, and does not have reason to believe that they do so.

D. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments

On November 6, 2000, the President issued Executive Order 13175 (65 FR 67249) entitled, "Consultation and Coordination with Indian Tribal Governments." Executive Order 13175 took effect on January 6, 2001, and revokes Executive Order 13084 (Tribal

Consultation) as of that date. EPA developed this final rule, however, under the period when EO 13084 was in effect; thus, EPA addressed tribal considerations under EO 13084.

Today's rule does not significantly or uniquely affect communities of Indian tribal governments. Overall, the rule significantly reduces the regulatory burden, and the few burden increases in the rule do not uniquely affect Indian tribal governments.

Nevertheless, we consulted with a representative organization of tribal groups, the Tribal Association on Solid Waste and Emergency Response. That organization did not provide us with any comments.

E. Executive Order 13132—Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Under CWA section 311(o), EPA believes that States are free to impose additional requirements, including more stringent requirements, relating to the prevention of oil discharges to navigable waters. In proposing modifications to the SPCC rule, EPA encouraged States to supplement the federal SPCC program and recognized that some States have more stringent requirements. 56 FR 54612 (Oct. 22, 1991). This rule does not preempt state law or regulations. Thus, Executive Order 13132 does not apply to this rule.

F. Executive Order 13211—Energy Effects

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The overall effect of the rule is to decrease the regulatory burden on facility owners or operators subject to its provisions.

G. Regulatory Flexibility Act (R.F.A.) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The R.F.A. generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined in the Small Business Administration's (SBA) regulations at 13 CFR 121.201—the SBA defines small businesses by category of business using North American Industry Classification System (NAICS) codes, and in the case of farms and production facilities, which constitute a large percentage of the facilities affected by this rule, generally defines small businesses as having less than $500,000 in revenues or 500 employees, respectively; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant *adverse* economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities." 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. This rule will significantly reduce regulatory burden on all facilities, particularly small facilities. For example, the rule exempts approximately 55,000 facilities from its scope. Approximately 41,300 of those facilities are small facilities, and of those, nearly 27,700 are small farms. This rulemaking will increase information collection burden for most facilities in the first year by approximately 0.75 million hours due principally to the estimated burden each facility will incur to read and understand the changes that we are making to the rule. However, the rule will also reduce the overall annual information collection burden by nearly 1.59 million hours a year in the second year and over 1.18 million hours a year in the third year of the information collection request, much of that for the small facilities that make up the large majority of our regulated universe. Further, the rule will reduce costs for both existing and new facilities.

Information collection and other provisions in the final rule that affect capital costs are expected to yield cost savings of about $7.56 million during the first year, $89.69 million during the second year and $74.51 million during subsequent years. The rule also gives all facilities greater flexibility in recordkeeping and other paperwork requirements. Finally, § 112.7(a)(2) of the rule gives small businesses and all other facilities the flexibility to use alternative methods to comply with the requirements of the rule if the facility explains its rationale for nonconformance and provides equivalent environmental protection. We have therefore concluded that today's final rule will relieve regulatory burden for all small entities.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

H. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative

that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Overall, the rule reduces burden and costs on all facilities. After the first and second year, the rule is expected to reduce the information collection burden by over 1.3 million hours annually.

Approximately 55,000 facilities will no longer be subject to the SPCC rule. Of these facilities, EPA estimates that approximately 3,500 existing facilities will no longer be required to maintain SPCC plans, due to the exemption for certain wastewater treatment systems. Other revisions are expected to exempt approximately 51,400 additional facilities 39,623 small facilities (including 27,700 small farms). The exemption for completely buried containers will result in approximately 14,000 facilities no longer subject to the rule, and 37,000 more facilities with some partial information collection reduction. Further, EPA estimates Information collection and capital costs are expected to decrease by over $74.25 million a year in the third year of the SPCC information collection request. In addition to these SPCC-related impacts, this rulemaking is estimated to result in cost savings for as many as 35 facilities that are expected to no longer require facility response plans due to the wastewater treatment system exemption. The result of the changes to the scope of the FRP information collection requirements is a cost savings of approximately $0.23 million per year. The rule also gives all facilities greater flexibility in recordkeeping and other paperwork requirements. Finally, § 112.7(a)(2) of the rule gives small businesses and all other facilities the flexibility to use alternate methods to comply with the requirements of the rule if the facility explains its rationale for nonconformance and describes its method of equivalent environmental protection. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

In developing this rule, EPA nevertheless consulted with representative organizations of State, local, and tribal governments. The representative organizations were the Environmental Council of the States, the National Association of Counties, and the Tribal Association on Solid Waste and Emergency Response. None of those organizations provided us with any comments. However, numerous States and local governments did comment on the rule proposals in all three proposed rulemakings. Those commenters submitted a wide variety of comments. EPA responses to those comments may be found in this document and in the Comment Response Documents.

EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. As explained above, the overall effect of the rule will be to reduce burden and costs for regulated facilities, including small governments that are subject to the rule.

I. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and has assigned OMB control number *2050–0021.*

EPA does not collect the information required by SPCC regulation on a routine basis. SPCC Plans ordinarily need not be submitted to EPA, but must generally be maintained at the facility. Preparation, implementation, and maintenance of an SPCC Plan by the facility helps prevent oil discharges, and mitigates the environmental damage caused by such discharges. Therefore, the primary user of the data is the facility. While EPA may, from time to time, request information under these regulations, such requests are not routine.

Although the facility is the primary data user, EPA also uses the data in certain situations. EPA primarily uses SPCC Plan data to ensure that facilities comply with the regulation. This includes design and operation specifications, and inspection requirements. EPA reviews SPCC Plans: (1) when it requests a facility to submit a Plan after certain oil discharges or to evaluate an extension request; and, (2) as part of EPA's inspection program. Note that the final rule eliminates the previous requirement to submit the entire Plan after certain discharges, and merely retains the requirement that it be maintained at the facility unless EPA requests a copy. State and local governments also use the data, which are not necessarily available elsewhere and can greatly assist local emergency preparedness efforts. Preparation of the information for affected facilities is required under section 311(j)(1) of the Act as implemented by 40 CFR part 112.

In the absence of this final rulemaking, EPA estimates that 469,274 facilities would have been subject to the rule in the first year and would have already prepared SPCC Plans. In addition, EPA estimates that approximately 4,700 new facilities would have become subject to the requirements of the rule annually. EPA also estimates that, in the absence of this rulemaking, the average annual public reporting and recordkeeping burden for this collection of information for existing and newly regulated facilities would have ranged between 4.9 to 13.8 hours and 39.4 to 100.4 hours, respectively, depending on facility characteristics (*e.g.,* storage capacity).

Through this rulemaking, we expect to reduce both the number of regulated facilities, as well as the average annual burden for facilities that remain regulated. The number of regulated facilities will be reduced by approximately 55,000. The average annual public reporting for facilities already regulated by the Oil Pollution Prevention regulation is estimated to range between 8.6 and 12.2 hours, while the burden for newly regulated facilities is estimated to range between 35.1 and 65.2 hours as a result of this rulemaking. These average annual burden estimates take into account the varied frequencies of response for individual facilities according to characteristics specific to those facilities, including the frequency of oil discharges and facility modification, but exclude the anticipated burden facilities may incur in the first year to read and understand the changes we are making to the rule.

Under the final rule, an estimated 419,033 existing and newly regulated facilities will be subject to the SPCC information collection requirements of this rule during the first year of the information collection period. The net annualized capital and start-up costs for

the SPCC information collection portion of the rule average $740,000 and net annualized labor and operation and maintenance costs are estimated to be $93.00 million for all of these facilities combined.

The information collection burden of the SPCC rule prior to this rulemaking averaged 2,828,150 hours per year. Under this final rule, the annual average burden over the next three-year ICR period is estimated to be 2,208,701 hours, resulting in a 22 percent average reduction. This rulemaking will increase burden for most facilities in the first year (totaling approximately 3.6 million hours) due principally to the estimated burden each facility will incur to read and understand the changes that we are making to the rule. The first-year burden also includes the additional need for certain facilities to amend and certify their SPCC plans to exclude wastewater treatment volumes from their oil storage capacity. Second year burden is expected to total approximately 1.3 million hours. In subsequent years, we estimate that the overall burden will be approximately 1.7 million hours annually, representing a nearly 40 percent reduction versus the average annual burden from the previous information collection period. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

In addition to reducing the information collection burden of SPCC facilities, this final rule also affects the number of facilities that require an FRP. The FRP rule (40 CFR 112.20–21) requires that owners or operators of facilities that could cause "substantial harm" to the environment by discharging oil into navigable waters or adjoining shorelines prepare plans for responding, to the maximum extent practicable, to a worst case discharge of oil, to a substantial threat of such a discharge, and, as appropriate, to discharges smaller than worst case discharges. All facilities subject to this requirement must submit their plans to EPA. In turn, we review and approve plans submitted by facilities identified as "significant and substantial harm" to the environment from oil discharges. Other facilities are not required to prepare FRPs but are required to document their determination that they do not meet the "substantial harm" criteria.

Prior to this rulemaking, EPA estimated that it requires between 99 and 132 hours for facility personnel in a large facility (*i.e.*, total storage capacity greater than 1 million gallons) and between 26 and 46 hours for personnel in a medium facility (*i.e.*, total storage capacity greater than 42,000 gallons and less than or equal to 1 million gallons) to comply with the annual, subsequent-year reporting and recordkeeping requirements of the FRP rule. We have also estimated that prior to this rulemaking newly regulated large and medium facilities will require between 253 and 293 hours and 109 and 142 hours, respectively, to prepare a plan in the first year. In the absence of this rulemaking, EPA estimates that the total number FRP facilities affected in the first year would have been 6,000 existing and 70 new facilities. Through this rulemaking the estimated number of facilities required to maintain FRPs is reduced to 5,965 and the number of new facilities that will be required to prepare and submit FRP plans is reduced to 64 facilities. This reduction in the number of facilities required to prepare, submit, and/or maintain an FRP would result in an average annual information collection burden reduction of 8,513 hours a year (624,252 to 615,739 hours).

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15. EPA is amending the table in 40 CFR part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the information requirements contained in this final rule.

J. National Technology Transfer and Advancement Act

As noted in the December 7, 1997, proposed rule, section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"). Pub. L. 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards such as materials specifications, test methods, sampling procedures, and business practices that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rulemaking involves technical standards. Throughout today's preamble, EPA has emphasized that owners or operators of facilities should use applicable industry standards in performing tests, inspections, and in monitoring. Section 112.3(d) provides that a Professional Engineer must certify that the SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards. We are providing examples of specific standards in today's preamble. However, due to the wide variety of facilities the rule involves, few standards would be applicable to all regulated facilities. Also, those standards change over time. Therefore, we are not incorporating those standards into rule text.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of Congress and to the Comptroller General of the United States. EPA has submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective August 16, 2002.

List of Subjects in 40 CFR Part 112

Environmental protection, Fire prevention, Flammable materials, Materials handling and storage, Oil pollution, Oil spill prevention, Oil spill response, Penalties, Petroleum, Reporting and recordkeeping requirements, Tanks, Water pollution control, Water resources.

Dated: June 28, 2002.

Christine Todd Whitman,

Administrator.

For the reasons set out in the preamble, title 40 CFR, chapter I, part

112 of the Code of Federal Regulations, is amended as follows:

PART 112—OIL POLLUTION PREVENTION

1. The authority for part 112 continues to read as follows:

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.

2. Part 112 is amended by designating §§ 112.1 through 112.7 as subpart A, adding a subpart heading and revising newly designated subpart A to read as follows:

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

Sec.

112.1 General applicability.
112.2 Definitions.
112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.
112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.
112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.
112.6 [Reserved].
112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

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

§ 112.1 General applicability.

(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 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. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in § 112.2.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the capacity of a container that is "permanently closed," as defined in § 112.2.

(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, except that such a tank 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.

(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.

§ 112.2 Definitions.

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, 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 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 the types of activity at the site.

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.

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.

Navigable waters means the waters of the United States, including the territorial seas.

(1) The term includes:

(i) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;

(ii) All interstate waters, including interstate wetlands;

(iii) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:

(A) That are or could be used by interstate or foreign travelers for recreational or other purposes; or

(B) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or,

(C) That are or could be used for industrial purposes by industries in interstate commerce;

(iv) All impoundments of waters otherwise defined as waters of the United States under this section;

(v) Tributaries of waters identified in paragraphs (1)(i) through (iv) of this definition;

(vi) The territorial sea; and

(vii) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (1) of this definition.

(2) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

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 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.

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or 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, or associated storage or measurement, and located in a single geographical oil or gas field operated by a single operator.

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.

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

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

(a) If your onshore or offshore 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, on or before February 17, 2003, and must implement the amended Plan as soon as possible, but not later than August 18, 2003. If your onshore or offshore facility becomes operational after August 16, 2002, through August 18, 2003, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare a Plan on or before August 18, 2003, and fully implement it as soon as possible, but not later than August 18, 2003.

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after August 18, 2003, 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.

(c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general plan. 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. You may not operate a mobile or portable facility subject to this part unless you have implemented the Plan. The Plan is applicable only while the facility is in a fixed (non-transportation) operating mode.

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.

(1) By means of this certification the Professional Engineer attests:

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

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

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

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

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

(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(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.

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

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.

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

§ 112.6 [Reserved]

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

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. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2),112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

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

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

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

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

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

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

(4) Unless you have submitted a response plan under § 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in § 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in § 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

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

(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). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

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

(ii) Curbing;

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

(iv) Weirs, booms, or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds; or

(vii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

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

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

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

(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).* (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

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

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

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

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

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

(ii) Prevention of discharges occurring through acts of vandalism.

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

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

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

(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.

3. Part 112 is amended adding subpart B consisting of §§ 112.8 through 112.11 to read as follows:

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)

Sec.

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

112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

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

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

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)

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

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 container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and

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

(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 each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(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). 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.

§ 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore 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 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) Provide all tank battery, separation, and treating facility installations with 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) 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.

(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) Have a program of flowline maintenance to prevent discharges from each flowline.

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

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.

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.

4. Part 112 is amended by adding subpart C consisting of §§ 112.12 through 112.15 to read as follows:

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

Sec.

112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).
112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.
112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.
112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart 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.

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

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, 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 container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and

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

(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 each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(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). 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.

§ 112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore 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 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 § 112.12(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) Provide all tank battery, separation, and treating facility installations with 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) 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.

(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) Have a program of flowline maintenance to prevent discharges from each flowline.

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

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.

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

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 that 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.

5. Part 112 is amended by designating §§ 112.20 and 112.21 as subpart D, and adding a subpart heading as follows:

Subpart D—Response Requirements

Sec.

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

Subpart D—Response Requirements

6. Section 112.20 is amended by revising the first sentence of paragraph (h) to read as follows:

§ 112.20 Facility response plans.

* * * * *

(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. * * *

* * * * *

Appendix C—[Amended]

7. Appendix C of part 112 is amended by:

a. Revising the first sentence of section 2.1; and

b. Revising the title and first sentence of section 2.4.

Appendix C to Part 112—Substantial Harm Criteria

* * * * *

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. * * *

* * * * *

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). * * *

* * * * *

Appendix D—[Amended]

8. Appendix D of part 112 is amended by revising footnote 2 to section A.2 of Part A to read as follows:

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

* * * * *

Part A * * *

* * * * *

A.2 Secondary Containment—Multiple-Tank Facilities

* * * * *

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).

* * * * *

Appendix F—[Amended]

9. Appendix F of part 112 is amended by:

a. Revising section 1.2.7;

b. Revising the second and last sentences of section 1.4.3;

c. Revising paragraph (7) and the undesignated paragraph and NOTE following paragraph (7) in section 1.7.3;

d. Revising section 1.8.1;

e. Revising the first two sentences of section 1.8.1.1. introductory text;

f. Revising the next to the last sentence of section 1.8.1.3;

g. Revising the next to last sentence of section 1.10.;

h. Revising paragraph (6) of section 2.1;

i. Remove the acronym ''SIC'' in section 3.0, and add in alphabetical order the acronym ''NAICS''; and.

j. Remove the reference to ''Standard Industrial Classification (SIC) Code'' in Attachment F–1, General Information, and add in in alphabetical order a reference to ''North American Industrial Classification System (NAICS) Code.''

The revisions read as follows:

Appendix F to Part 112—Facility-Specific Response Plan

* * * * *

1.2.7 Current Operation

Briefly describe the facility's operations and include the North American Industrial Classification System (NAICS) code.

* * * * *

1.4.3 Analysis of the Potential for an Oil Discharge

* * * 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. * * * The owner or operator may need to research the age of the tanks the oil discharge history at the facility.

* * * * *

1.7.3 Containment and Drainage Planning

* * * * *

(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.

* * * * *

1.8.1 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. * * *

* * * * *

1.8.1.3 Secondary Containment Inspection

* * * * *

* * * Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

* * * * *

1.10 Security

According to 40 CFR 112.7(g) facilities are required to maintain a certain level of security, as appropriate. * * *

* * * * *

2.1 General Information

* * * * *

(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.)

* * * * *

3.0 Acronyms

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NAICS: North American Industrial Classification System

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Attachments to Appendix F

Attachment F–1—Response Plan Cover Sheet

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General Information

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North American Industrial Classification System (NAICS) Code:

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[FR Doc. 02–16852 Filed 7–16–02; 8:45 am]

BILLING CODE 6560–50–P