

APPENDIX B  
SAMPLE SPCC PLAN

Spill Prevention Control and Countermeasure Plan

Washington Bulk Storage Terminal  
ABC Oil Company  
1111 Main Street  
Seattle, Washington 98000  
Telephone (000) 123-4567

Contact  
John Doe, Manager

Certification:  
Engineer: I.M. TAT

Signature:

License Number: 0000-00

State: Oregon  
Date: 10 January 1974

NOTE: This is for shops  
that have a single tank  
> 460 gallons or combined  
tanks > 1,320 gallons (Seal)

1. Name and Ownership

Name: ABC Oil Company  
100 Neverspill Road  
Post Office Box 100  
Oilville, Washington 98000  
Telephone (123) 456-7890

Manager: John Doe  
505 Oil Road  
Oilville, Washington 98000  
Telephone: (123) 456-0987

Owner: Ms. A.A. Jones

Other

Personnel: Secretary-Bookkeeper  
Dispatcher  
Transport Driver  
(3) Delivery People

Service

Area: King County, Washington

2. Description of Facility

The bulk plant of the ABC Oil Company handles, stores, and distributes petroleum products in the form of motor gasoline, kerosene, and No. 2 fuel oil. The accompanying drawing shows the

property boundaries and adjacent highway, drainage ditches, on-site buildings, and oil handling facilities.

Fixed

Storage: (2) 20,000 gallon vertical tanks (premium gasoline)  
(2) 20,000 gallon vertical tanks (regular gasoline)  
(2) 20,000 gallon vertical tanks (No. 2 fuel oil)  
(1) 20,000 gallon vertical tanks (kerosene)

Total: 140,000 gallons

Vehicles: (1) Transport Truck  
(4) Tankwagon Delivery Trucks

The bulk plant is surrounded by steel security fencing and the gate is locked when the plant is unattended. Two area lights are located in such positions so as to illuminate the office and storage areas.

3. Past Spill Experiences

(None)

4. Spill Prevention - Storage Tanks

- 1) Each tank is UL-142 construction (aboveground use).
- 2) The main outlet valve on each tank is lock-shut when the plant is unattended.
- 3) Each tank is equipped with a direct-reading gauge.
- 4) Venting capacity is suitable for the fill and withdrawal rates.
- 5) Main power switch for pumps is located in a box which is locked when the bulk plant is unattended.
- 6) A dike surrounds the tank assembly. Its volume (height vs. area) is computed based on a single largest tank within (20,000 gallons) and allowance is made for all additional vertical tank displacement volumes below the dike height (estimated spill liquid level). Total storage capacity is 140,000 gallons. A 2-inch water drain is located at the lowest point within dike enclosure and it connects to a normally-closed gate valve outside the dike.

5. Spill Prevention - Vehicular

- 1) On site  
The frontal highway ditch and the ditch on the property's southern boundary intersect before crossing the highway through a culvert headed eastward and eventually to a stream located approximately one-half mile distant. Emergency containment action will constitute the erection of an earthen dam and placement of absorbent pillars at the entrance to the culvert. Additional cascading of barriers will be provided as necessary.

Personnel training and drill are described herein later.

- 2) Off site  
Each vehicle is equipped with a shovel and two absorbent

pillars. The driver is instructed to achieve emergency containment, if possible, then call the office for help immediately.

#### 6. Personnel

All personnel have been instructed and rehearsed in the following SPCC practices:

- 1) No tank compartments to be filled prior to checking reserves.
- 2) No pump operations unless attended continuously.
- 3) Warning signs are displayed to check for line disconnections before vehicle departures.
- 4) Instruction has been held on oil spill prevention, containment, and retrieval methods, and a "dry-run" drill for an on-site vehicular spill incident has been conducted.
- 5) Instructions and phone numbers have been publicized and posted at the office regarding the report of a spill to the National Response Center (1-800-424-8802), the U.S. Coast Guard, the EPA, and the applicable State Environmental agency.
- 6) Instructions and company regulations have been posted conspicuously which relate to oil spill prevention and countermeasure procedures.

#### 7. Future Spill Prevention Plans

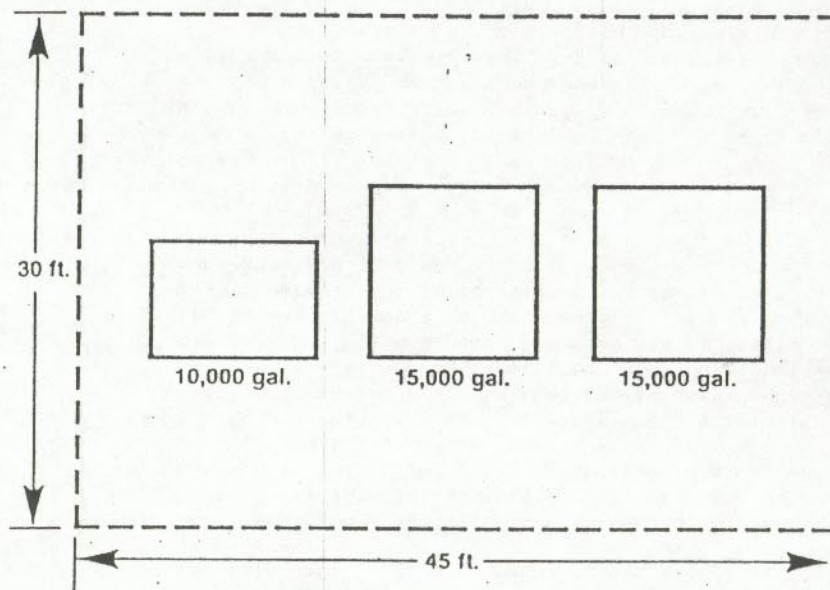
By July 10, 1996 (implementation deadline) the following additional plans will be completed:

- 1) On-site storage of spill containment and retrieval materials and equipment: bagged absorbent, absorbent pillars and booms, and tools. Storage facility will be well-publicized and clearly identified.
- 2) Installation of a sand-filled catchment basin for minor, routine spillage at loading pump intakes and at loading rack. Sand to be periodically replaced.
- 3) A routine inspection program with check-off listing of tanks, piping, valves, hoses, and pumps for the prevention of both major spills and also minor spills or leakage through proper maintenance.

John Doe

\_\_\_\_\_  
Signature

#### 1. Example of Design: Horizontal Tanks Only Plan View - Available dike position



(a) Minimum Containment Volume is single largest tank dike: 15,000 gallons, this example

$$15,000 \text{ gal.}, @.1337 \text{ cu ft/gal} = 2006 \text{ cu ft.}$$

(b) Available Area:

$$30 \text{ ft} \times 45 \text{ ft} = 1350 \text{ sq ft, this example.}$$

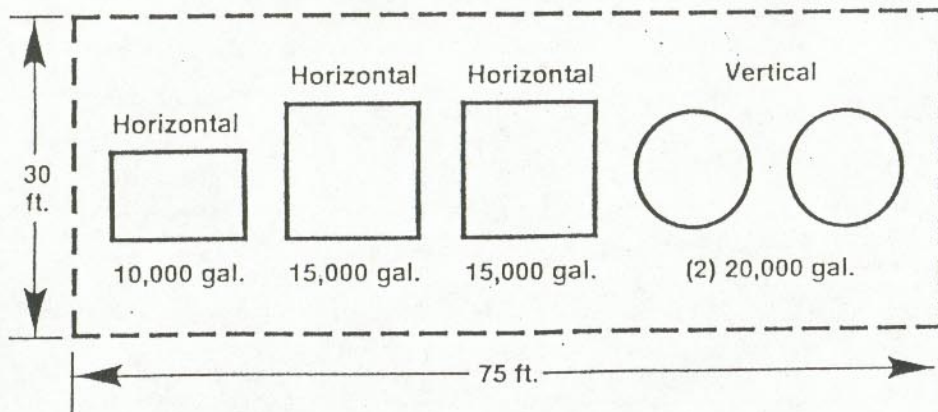
(c) Average Dike Height "h" is:

$$h \times 1350 \text{ sq ft} = 2006 \text{ cu ft.}$$

$$h = 2006 \div 1350$$

$$h = 1.486 \text{ ft.} = 17.8 \text{ inches plus freeboard.}$$

2. Example of Design: Horizontal and Vertical Tanks  
 Flat Area - Available Dike SECTION



- (a) From code, the Minimum Containment Volume is single largest tank within dike: 20,000 gallons, this example.  
 20,000 gallons x .1337 cu ft/gallon = 2674 cu ft.
- (b) Available Dike Area, this example: 30 ft x 75 ft = 2250 sq ft.
- (c) Observe that some volume of the vertical tanks goes below the dike wall height (see last sentence, paragraph 1.a). This volume of the second 20,000 gallon tank (and any additional verticals) assumed not ruptured must be considered.
- (d) Average Dike Height "h" is:

$h \times \text{Area of Dike} = \text{Minimum Containment Volume} + h \times \text{circular area of second and any additional vertical tanks.}$

$h \times 2250 \text{ sq ft} = 2674 \text{ cu ft} + h \times 3.14 \times 5.25 \times 5.25 \text{ (radius squared)}$

$$2250 h - 86.5h = 2674$$

$$2163.5h = 1.236 \text{ ft} = 14.8 \text{ inches.}$$

Average Dike Height = approximately 15 inches plus freeboard.

GLOSSARY

- Discharge:** Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping. Excludes discharges in compliance with a permit under section 402 of the Clean Water Act (CWA); discharges resulting from circumstances identified, reviewed, and made part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a conditions 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.
- Facility:** 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, and waste treatment. The boundaries of a facility may depend on several site-specific factors, including, but not limited to, the ownership or operation of building, structures, and equipment on the same site and the types of activity at the site.
- Harmful Quantity:** Includes discharges of oil that violate applicable water quality standards or cause a sludge or emission to be deposited beneath the surface of the water or upon adjoining shorelines.
- Injury:** 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 of oil, or exposure to a product of reactions resulting from a discharge of oil.
- Navigable Waters:** As defined by 40 CFR Part 110.1, means the waters of the United States, including the territorial seas. The term includes:
- (a) 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 that are subject to the ebb and flow of the tide;
  - (b) Interstate waters, including interstate wetlands;