



STRATEGIES FOR DEVELOPING AND
IMPLEMENTING A SPILL PREVENTION CONTROL
AND COUNTERMEASURE (SPCC) PLAN

A GUIDE TO SPCC PLANNING

By Wessler Engineering

What is SPCC?

SPCC stands for spill prevention control and countermeasures. In 1973, the federal government passed a law to prevent oil spills and require facilities to plan for countermeasure activities in the event of oil releases to navigable waters. The full law language is included in the [Code for Federal Regulations \(40 CFR Part 112\)](#). SPCC plans must be developed and implemented by all regulated facilities.

Who is regulated?

You must develop and implement an SPCC plan if you meet the following three requirements:

- » *You store, process, transfer, distribute, use, consume, drill, produce, gather, or refine oil or oil products. Oil products include petroleum oils and fuels (including gasoline, asphalt, kerosene, motor oil, etc); animal and fish oils; vegetable, nut or fruit oils; synthetic oils; oils mixed with waste and any other kind of natural or man-made oil.*
- » *Your container sizes are 55-gallons and larger. Regulated containers include 55-gallon drums, 300-gallon totes, aboveground tanks, underground tanks [that are not regulated by Underground Storage Tank (UST) rules], partially buried tanks, oil-filled equipment, oil/fuel-powered generators, and mobile tanks that are not used to power the movement of a motor vehicle.*
- » *The full capacity of each container must be included even if the container is not typically full. The total capacity of aboveground containers is greater than 1,320 gallons, or the total capacity of underground tanks (not regulated by UST rules) is greater than 42,000 gallons.*

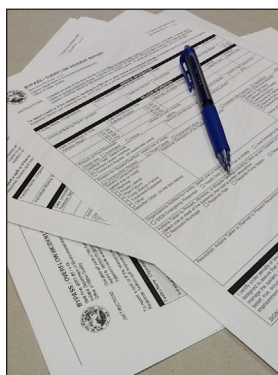


What areas of my facility are regulated?

You will need to define your “facility” boundaries, the boundaries which are to be included for SPCC planning. The facility may include buildings, structures, and equipment that you own or operate, and it may depend on the types of activities conducted on your site and who has control over those activities. The plan should clearly define the SPCC-regulated activities.



Plan Certification



SPCC plans must be prepared and certified by a professional engineer. However, if you are a Tier I or Tier II facility, self-certification is allowed. [Review current SPCC regulatory language for Tier I and Tier II criteria](#) [this is found in 40 CFR 112.3(g)] to see if self certification is a possibility for your facility.

What do I need to develop an SPCC Plan?

SPCC PLAN ELEMENTS:

In general, the SPCC Plan must contain the following three elements:

1. Operating procedures that prevent oil spills
2. Control measures to contain an oil spill
3. Countermeasures to clean up and mitigate the effects of an oil spill

DEVELOPING YOUR SPCC PLAN:

You should prepare a facility diagram and provide proper recordkeeping, inspections, and training.

» *Illustrate the physical layout of the facility*

» *Locate and label all regulated storage containers, equipment, transfer areas, piping and connection points*

» *Records of inspections, plan revisions, and integrity testing must be kept for at least three years*

» *Personnel who handle oils must be trained to implement the SPCC plan*



Spill Prevention

The first goal of the SPCC Plan is [spill prevention](#). Controls and practices must be in place for all locations where oils are used, stored, transferred, or produced. To prevent spills, you should evaluate the potential spills at each regulated container or activity.

SPILL PREVENTION BEST PRACTICES:

- » *Use compatible containers and provide secondary containment for bulk and containerized storage*
 - » *Provide overfill alarms*
 - » *Provide spill equipment*
 - » *Inspect storage locations*
 - » *Document discharge prevention measures*
- 
- » *Predict the flow direction and rate of flow of spills*
 - » *Estimate the quantity of oil that could be discharged in the event of an equipment failure*
 - » *Describe existing containment and/or diversion structures, which would prevent an oil spill from entering U.S. waters*
 - » *Provide security for the facility*
 - » *Provide adequate lighting to detect spills and deter vandalism*

Control Measures

The second goal of the SPCC Plan is to **control** spills. When a spill occurs, the facility must provide containment or diversionary structures and equipment to control the spill in the general vicinity of the spill. Spills may be controlled by one of the methods below.

SPILL CONTROL METHODS:

- » *Dikes, berms, or retaining walls designed to contain oil*
- » *Curbing, weirs, or booms*
- » *Culverts, gutters or other drainage systems to divert spills*
- » *Retention ponds*
- » *Absorbent materials and spill kits*



Countermeasures

The third goal of the SPCC Plan is to be able to implement **countermeasures** to respond, clean up, and mitigate a spill. The following is a list of possible countermeasures:

COUNTERMEASURE IMPLEMENTATION TIPS:

- » *Have spill equipment available to use in event of spill*
- » *Place booms in path of spill to keep from spreading*
- » *Place drain covers over stormwater drains or place valves in the closed position*
- » *Determine if emergency contact agencies require notification*
- » *Retain contact information for facility response, local responders, cleanup contractors, Federal/State/Local agencies*
- » *Use absorbent granules or mats/socks to absorb*
- » *Evaluate manpower available for quick response*
- » *Develop a plan for the proper disposal of used absorbents, contaminated soil, and other recovered materials.*

SPCC Resources:

- » EPA's SPCC Rule (<http://www.epa.gov/emergencies/content/spcc/index.htm>)
- » EPA's Oil Spill home page (<http://www.epa.gov/oilspill/>)

About Wessler

Wessler is an engineering firm dedicated to bringing our clients' vision to life. We strive to make our relationships
More than a Project™



WWW.WESSLERENGINEERING.COM

Wessler Engineering is headquartered in Indianapolis, Indiana with additional offices in Fort Wayne, Evansville, and West Lafayette. Our markets and services include:

- » *Wastewater Treatment*
- » *Wastewater Collection*
- » *Drinking Water Treatment*
- » *Drinking Water Distribution*
- » *Stormwater*
- » *Environmental Services*
- » *Transportation*
- » *Electrical*
- » *Field Services*
- » *Construction Services*
- » *Airports*
- » *Industrial*

About the Author



EDUCATION

Purdue University
B.S., Environmental Engineering,
B.S., Forestry &
Natural Resources

REGISTRATIONS

Registered Professional Engineer,
Indiana

CERTIFICATIONS

Certified Professional in Erosion
and Sediment Control (CPESC)

Leadership in Energy and
Environmental Design Accredited
Professional (LEED AP)

National Environmental Policy Act
(NEPA) Training Certification and
Categorical Exclusion Training

Mary K. Atkins, P.E., C.P.E.S.C., LEED AP, is the head of the Environmental Services Group and project manager with more than ten years of professional experience on environmental planning and permitting projects. Mary is responsible for the planning, scheduling, and technical quality control/quality assurance of our environmental projects and is experienced in DNR construction in a floodway permitting; stormwater pollution prevention planning; stormwater utility formation; wellhead protection planning; erosion and sediment control planning and permitting; IDEM and Army Corps water quality permitting; post-construction stormwater quality; NPDES permitting for industrial activities exposed to storm water runoff; Phase II NPDES permitting for Municipal Separate Storm Sewer Systems; Spill Prevention Control and Countermeasures planning; environmental impact evaluations; industrial pretreatment programming and wetland delineations.

INSIDER'S SCOOP:

After graduating from Purdue, Mary's first job interview was with Wessler. She was offered the job and has been with Wessler for more than a decade.



6219 South East Street
Indianapolis, IN 46227

(317) 788-4551
MaryA@wesslerengineering.com

WWW.WESSLERENGINEERING.COM