Storm Water Permitting and SPCC and SWPPP Compliance

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July 20, 2023

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Agenda

- Ohio EPA NPDES Stormwater Program Updates
- Spill Prevention Control and Countermeasure (SPCC) Plan
- Stormwater Pollution Prevention Plan (SWPPP)

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Ohio EPA NPDES Stormwater Program Updates

Jason Fyffe, Ohio EPA, Division of Surface Water

July 20, 2023

Ohio Environmental Protection Agency

NPDES Construction Stormwater

- OHC000006 effective **April 23, 2023**
- Renewing Coverage
  - If needed, must renew coverage by **October 20, 2023**
    - Submit a renewal Notice of Intent (NOI)
    - Renewal NOI application fee based upon remaining acreage disturbance
    - No renewal application fee if previous coverage was issued on or after **April 23, 2022**

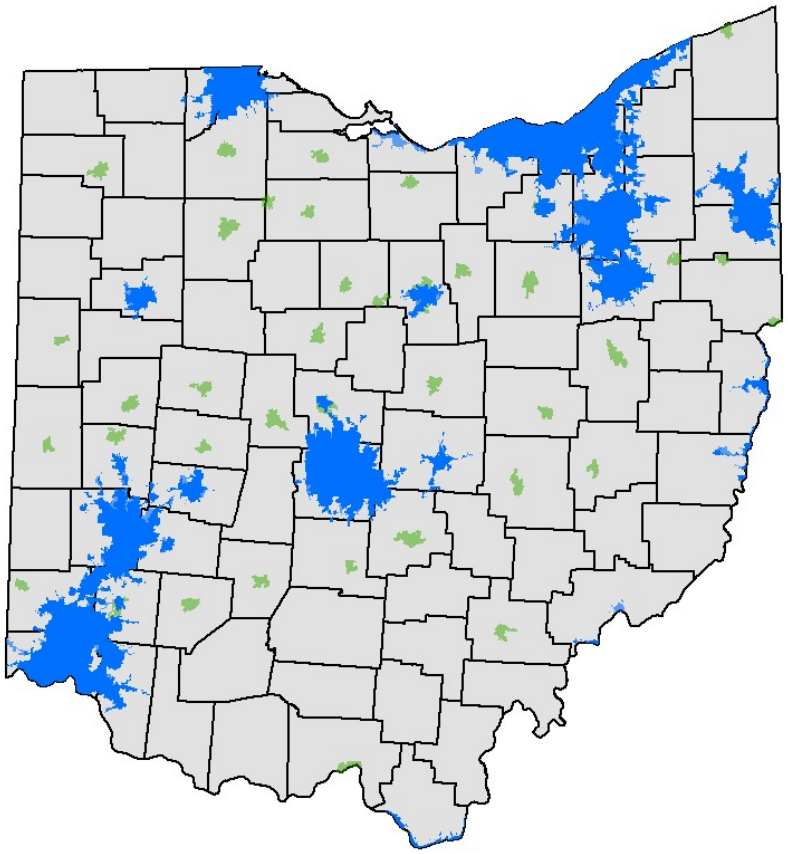
Ohio Environmental Protection Agency

NPDES MS4 Stormwater

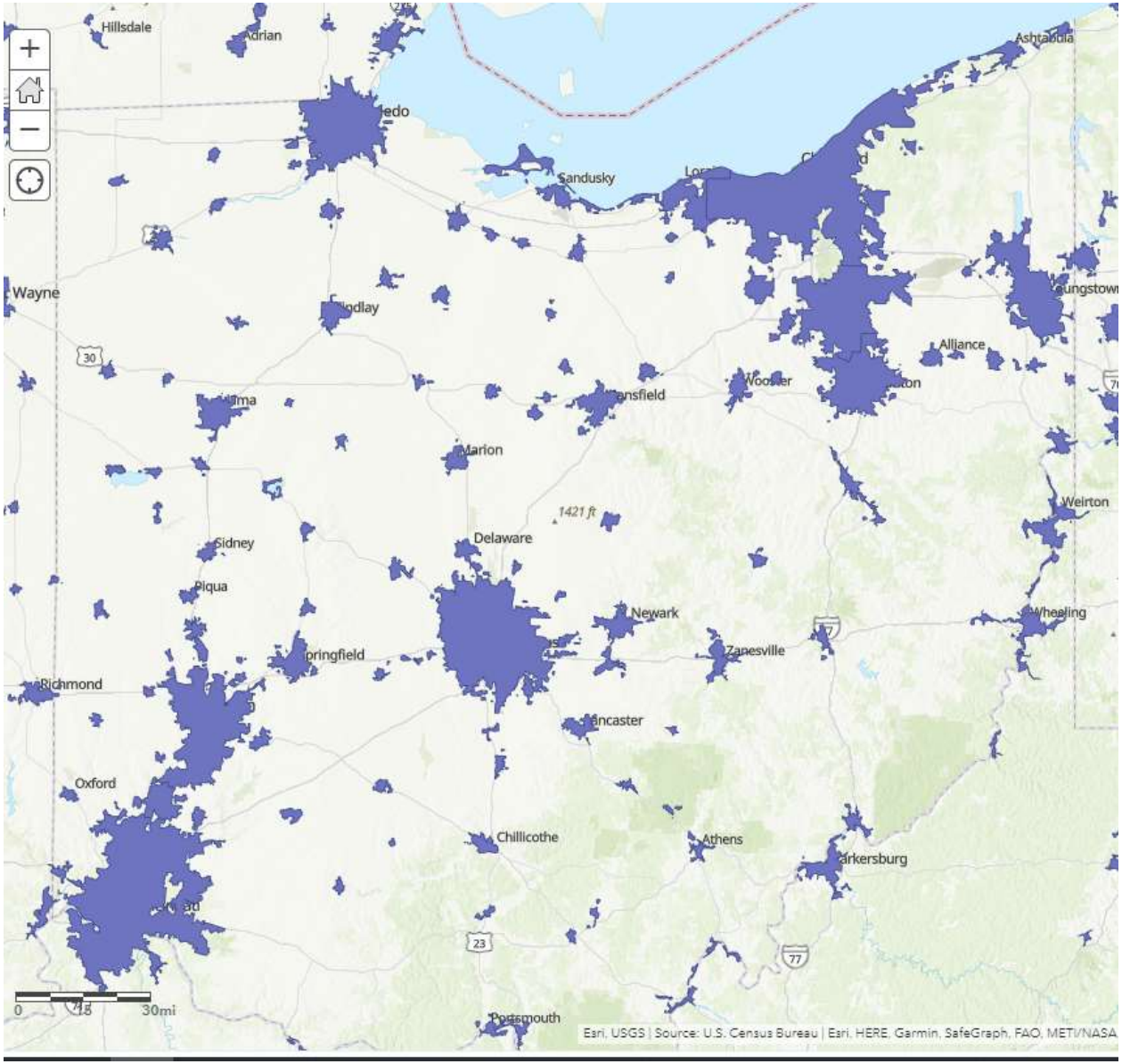
- 2020 Census and future Censuses will not identify urbanized areas

- USEPA Small MS4 Urbanized Area Clarification Rule – Became effective **July 12, 2023**.
  - **"Urban Area with a Population of 50,000 or More People"**

Map based on 2000 & 2010 Census Data



Ohio Environmental Protection Agency



2020 Urban Areas from Census Bureau

Ohio Environmental Protection Agency

Construction Stormwater from Oil and Gas Linear Transmission Line and Gathering Line Installation (OHCG00001)

- OHCG00001 Expires **September 16, 2023**
- Ohio EPA will not be renewing this general permit
- All existing permittees were emailed a letter on **July 12, 2023** regarding compliance with OHCG00001 and recommendations going forward

Ohio Environmental Protection Agency

NPDES Industrial Stormwater

- Industrial Stormwater General Permit Coverage Letter Improvements

Outfall: 001 999 - OHR0000 - No Benchmark or Effluent Limit Monitoring Reqd

Parameter	Sampling		Monitoring Months	Concentration Limits			
	Type	Frequency		Max	Min	Wkly	Mthly

- Upcoming Improvements to Industrial Stormwater NOI

Outfall: 001 271 - OHR000007 - Benchmark - Fabricated Metal Products

Parameter	Sampling		Monitoring Months	Concentration Limits			
	Type	Frequency		Max	Min	Wkly	Mthly
00630 - Nitrite Plus Nitrate, Total - mg/l	Grab	When Disch.	All	0.68			
00900 - Hardness, Total (CaCO3) - mg/l	Grab	When Disch.	All				
01092 - Zinc, Total (Zn) - ug/l	Grab	When Disch.	All	390			
01105 - Aluminium, Total (Al) - ug/l	Grab	When Disch.	All	750			

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Common Issues/Violations

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Uncontrolled Washing Activities

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Tank Storage

No Secondary Containment

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Barrel Storage

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Waste Management

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Employee Training

- Develop program to inform personnel
  - Topics may include spill response, good housekeeping and material management
  - Explain components and goals of SWPPP
  - SWPPP shall identify periodic dates for training (at least annually)

Ohio Environmental Protection Agency

Inspections & Monitoring

- Routine Facility Inspections
- Quarterly Visual Assessments
- Benchmark Monitoring

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Documentation & Recordkeeping

MSGP Quarterly Visual Assessment Form

(Complete a separate form for each outfall you assess)

Name of Facility: Name of Facility

Ohio EPA Facility Permit No. Insert Ohio EPA Facility Permit No.

Outfall Name: Name "Substantially Identical Outfall"? ☐ No ☐ Yes (identify substantially identical outfalls):

Person(s)/Title(s) collecting sample: Name/Title

Person(s)/Title(s) examining sample: Name/Title

Date & Time Discharge Began: Enter date and time

Date & Time Sample Collected: Enter date and time

Date & Time Sample Examined: Enter date and time

Substitute Sample? ☐ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: No of inches, inches

Previous Storm Ended > 72 hours Before Start of This Storm? ☐ Yes ☐ No* (explain):

Stormwater Industrial Routine Facility Inspection Report

General Information			
Facility Name	Insert Name		
Ohio EPA Facility Permit No.	Insert Ohio EPA Facility Permit No.		
Date of Inspection	Insert Date	**Start/End Time**	Insert Start/End Time
Inspector's Name(s)	Insert Name		
Inspector's Title(s)	Insert Title		
Inspector's Contact Information	Insert Contact Info		
Inspector's Qualifications	Insert qualifications or add reference to the SWPPP		
Weather Information			
Weather at time of this inspection? ❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snow ❑ High Winds ❑ Other: Temperature:			
Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ❑No **If yes, describe:** Describe			
Are there any discharges occurring at the time of inspection? ❑Yes ❑No **If yes, describe:** Describe			

B. Employee training

Instructions:

- Keep records of employee training, including the date of the training (see Part 2.1.2.9 of the MSGP).
- For in-person training, consider using the tables below to document your employee trainings. For computer-based or other types of training, keep similar records on who was trained and the type of training conducted.

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	**Employee signature**
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Ohio Environmental Protection Agency

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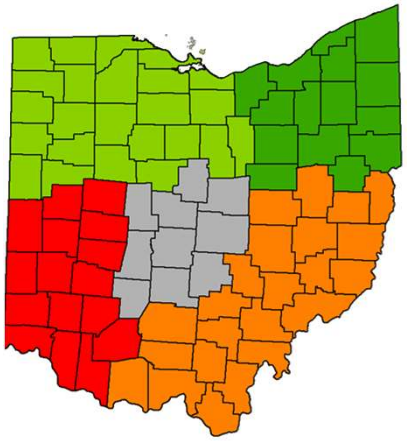

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epa.ohio.gov/divisions-and-offices/surface-water/permitting/stormwater-program

Ohio Environmental Protection Agency

Oil Pollution Prevention – 40 CFR 112

Spill Prevention, Control and Countermeasure Plan (SPCC)

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Key Definitions

- CWA – Clean Water Act
  - Primary US EPA law governing water pollution to restore and maintain chemical, physical, and biological integrity of WOTUS
- SWPPP – Stormwater Pollution Prevention Plan
  - Outlines actions a facility will take to minimize and prevent potential negative impact on storm water quality
- SPCC – Spill Prevention Control and Countermeasure Plan
  - Establishes procedures, methods, and equipment for prevention, minimization and response to oil discharges

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SPCC – Regulatory Background

- **Purpose** - 40 CFR Part 112 requires a Spill Prevention, Control, and Countermeasure (SPCC) Plan for certain facilities to prevent a discharge of oil into navigable waters or adjoining shorelines.
- **Federal Applicability** - Any facility with aggregate aboveground oil storage capacity **greater than 1,320 U.S. gallons**, OR completely buried storage capacity greater than 42,000 U.S. gallons, AND there is a reasonable expectation of an oil discharge into or upon navigable waters of the U.S. or adjoining shorelines.

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SPCC "Reasonable Expectation" of Discharge

- Geography – Proximity of facility
- Transport of "oil" offsite –
  - Ditches, creeks, streams
  - Sewers (onsite and offsite)
  - Precipitation runoff
  - Groundwater

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What types of “oil” are covered?

- Petroleum
- Fuel oil (diesel, biodiesel)
- Sludge
- Oil refuse (waste oil, oily water)
- Oil mixed with wastes other than dredged spoil
- Fats, oils or greases of animal, fish, or marine mammal origin
- Vegetable oils, including oil from seeds, nuts, fruits, or kernels
- Other oils and greases, including synthetic oils and mineral oils.
- US Coast Guard Oil List

Layman’s terms: if it causes a film or sheen in water, consider it an oil

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How to calculate oil storage capacity?

- Add up the shell capacities of each oil container (maximum volume)
- **Do not use** the actual amount of product stored in the container or tank (i.e., operational volume or working capacity).
- Count only containers with storage capacity **equal to or greater than 55 U.S. gallons**
- Include drums, tanks and oil-filled equipment (such as gear boxes, hydraulic equipment, cooling systems, lubricating systems, flow-through process vessels, etc.).

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Oil Inventory – Common Exemptions

- Motive power containers
  - Used to power the movement of a motor vehicle
  - Note – oil transfer activities still regulated
- Wastewater treatment
  - Likely to be regulated by NPDES
  - Exemption does not apply to production, recovery, or recycling of oil; part of facility used to store oil (bulk storage); anything used to satisfy SPCC requirements (i.e., O/W separator used for secondary containment)
- Permanently closed containers
- Hot-mix asphalt
  - Low potential to reach navigable waters since low flow

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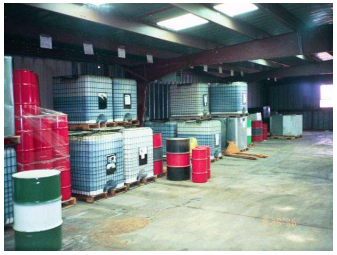
SPCC Applicability

Yes

55-gallons or greater



Totes

Drums

Tanks

Oil-filled equipment

No

5-gal pail

30-gal drum

Motive Power Containers

Wastewater treatment

Permanently Closed

Milk and Milk Products

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SPCC Plan – Key Elements

- Facility diagram or site map
- Oil sources, storage volumes and discharge predictions
- Secondary containment or diversionary structures
- Facility drainage
- Site security
- Requirements for bulk storage containers including inspections, overfill, and integrity testing requirements
- Transfer procedures and equipment (including piping)
- Requirements for qualified oil-filled operational equipment
- Loading/unloading rack requirements
- Personnel training and oil discharge prevention briefings
- Management approval (and certification in some cases)
- Plan certification by a Professional Engineer (PE) (for facilities > 10,000 gallons of oil storage)

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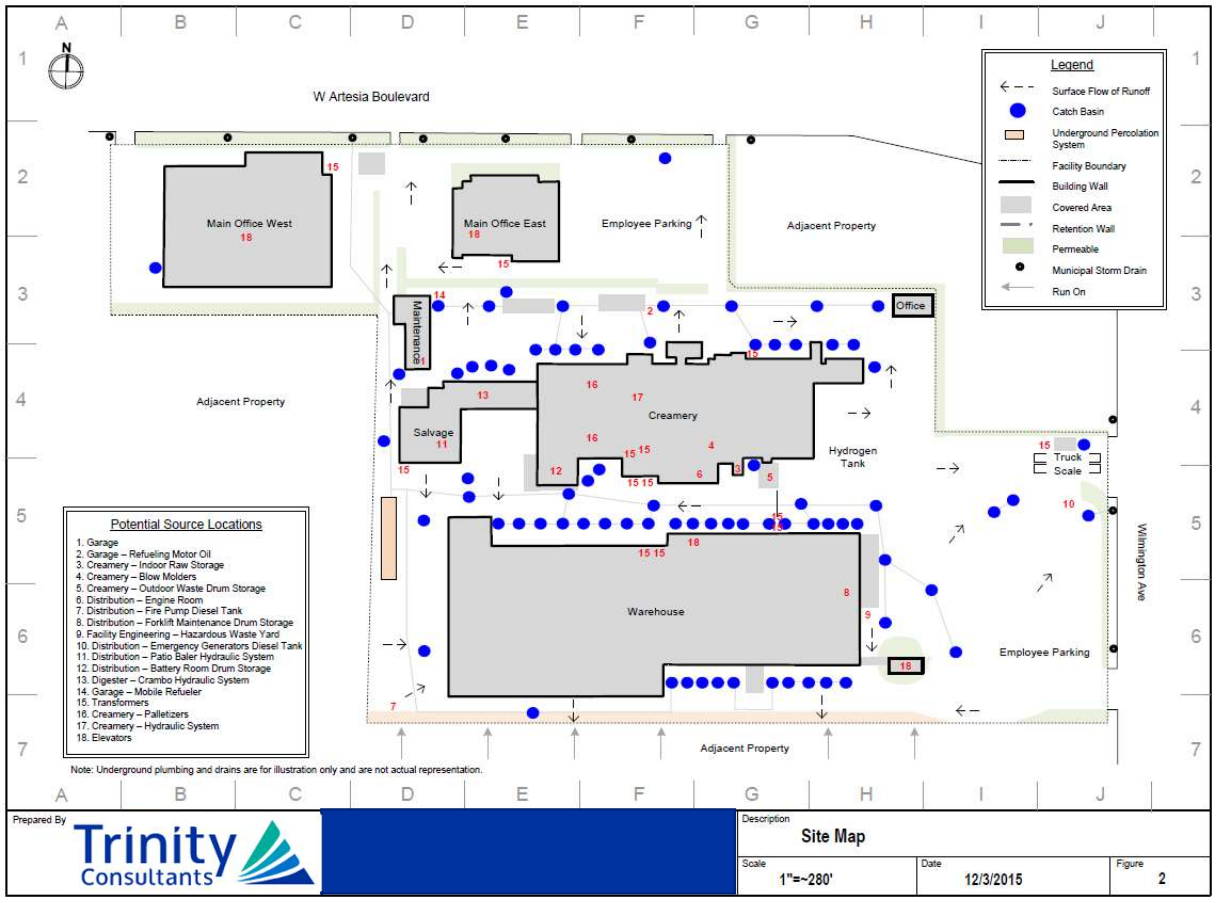
SPCC Plan – Site Map Example



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What is Secondary Containment?

- Your last line of physical defense in keeping oil spills from discharging off-site
- When inspections, maintenance, and primary containers have failed
- BIG part of SPCC compliance – don't wait until your five-year recertification to understand your requirements!

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SPCC Secondary Containment Requirement

- Secondary containment requirements are separated into two categories: **general** and **sized**
- "General" secondary containment must be designed to prevent an offsite discharge of oil – 40 CFR 112.7(c)
  - Applies to all SPCC-regulated containers and oil-handling areas (e.g., oil inventory list), except qualified OFOE
- "Sized" secondary containment must be designed to hold the **entire capacity of the largest single container and sufficient freeboard** to contain precipitation – 40 CFR 112.7(h)(1), 112.8(c)(2), 112.8/12(c)(11)
  - Applies only to loading/unloading racks, bulk storage containers, and mobile/portable containers

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GENERAL Secondary Containment (1/2)

- Required for ALL activities and containers subject to SPCC, including:
  - Bulk storage tanks
  - Portable/mobile containers
  - Oil-filled operational equipment
  - Oil transfer areas
  - Loading racks
  - Piping
- Determine the best method using engineering judgement to contain the **most likely discharge of oil** until cleanup occurs
- When sized secondary containment is required, the sized secondary containment fulfills the general secondary containment requirements (ex: storage tanks, loading racks, etc.)

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GENERAL Secondary Containment (2/2)

- When determining the method for general secondary containment, consider the most likely failure mode of the equipment
  - Ex: Container overflow, pump malfunction, tank rupture
- Consider oil flow rate, employee response time, and maximum duration discharge could occur

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Loading Rack vs Transfer Area

- 40 CFR 112.2: ***Loading/unloading rack*** means a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm, and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices.
  - Subject to sized secondary containment requirements
- A **transfer area** is any area of a facility where oil is transferred between bulk storage containers and tank trucks or railroad cars.
  - Subject to general secondary containment requirements

https://www.safe-harbor.com/loading-racks.html

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SIZED Secondary Containment (1/2)

- Required for:
  - Bulk storage tanks
  - Portable and mobile containers
  - Loading racks
- Requirements for **Loading/Unloading Racks** [§112.7(h)]
  - Where drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system (device that drains oil away from area to some means of secondary containment)
  - Must be designed to hold the **max capacity of any single compartment** of a tank car or tank truck loaded or unloaded at the facility

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SIZED Secondary Containment (2/2)

- Requirements for **Bulk Storage** [§112.8(c)(2)] Containers:
  - Must be designed to hold the **entire capacity of the largest single container plus sufficient freeboard for precipitation**
  - Sufficient freeboard – Not defined in the rule
    - 110% of largest tank
    - 25-year, 24-hour precipitation event
  - Good engineering practice (PE certifying SPCC) makes determination
  - Important factors include
    - NOAA data
    - Height of dike wall
    - Volume of container
    - Footprint of containment area
    - Frequency of dike drainage/inspection

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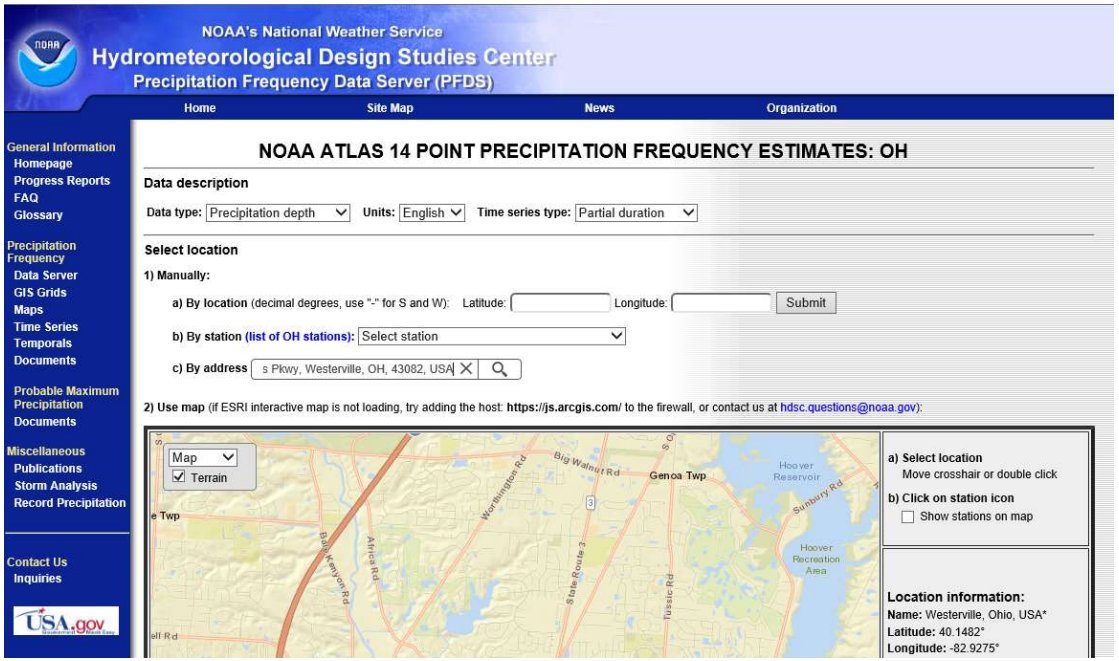
Sufficient Freeboard

- NOAA data available online to search by location:
  - https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html



Sufficient Freeboard

PF tabular | PF graphical | Supplementary information | Print page

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.355 (0.324-0.389)	0.424 (0.388-0.466)	0.509 (0.464-0.558)	0.575 (0.523-0.628)	0.657 (0.595-0.718)	0.721 (0.650-0.786)	0.783 (0.702-0.851)	0.845 (0.754-0.920)	0.928 (0.821-1.01)	0.988 (0.868-1.07)
10-min	0.551 (0.503-0.604)	0.662 (0.605-0.727)	0.791 (0.720-0.868)	0.887 (0.807-0.970)	1.01 (0.910-1.10)	1.09 (0.985-1.19)	1.18 (1.06-1.28)	1.26 (1.13-1.37)	1.37 (1.21-1.48)	1.44 (1.26-1.56)
15-min	0.676 (0.617-0.741)	0.810 (0.740-0.889)	0.971 (0.885-1.07)	1.09 (0.993-1.19)	1.24 (1.12-1.36)	1.35 (1.22-1.48)	1.46 (1.31-1.59)	1.57 (1.40-1.71)	1.70 (1.51-1.85)	1.80 (1.58-1.96)
30-min	0.894 (0.816-0.980)	1.08 (0.990-1.19)	1.33 (1.21-1.46)	1.52 (1.38-1.66)	1.75 (1.59-1.92)	1.93 (1.74-2.11)	2.11 (1.90-2.30)	2.29 (2.04-2.49)	2.52 (2.23-2.74)	2.70 (2.37-2.93)
60-min	1.09 (0.996-1.20)	1.33 (1.22-1.46)	1.67 (1.52-1.83)	1.93 (1.75-2.11)	2.28 (2.06-2.49)	2.55 (2.30-2.78)	2.83 (2.53-3.07)	3.11 (2.77-3.38)	3.49 (3.09-3.80)	3.79 (3.33-4.12)
2-hr	1.28 (1.17-1.40)	1.55 (1.42-1.70)	1.95 (1.78-2.14)	2.26 (2.06-2.48)	2.70 (2.44-2.94)	3.04 (2.74-3.32)	3.40 (3.05-3.70)	3.78 (3.36-4.10)	4.30 (3.79-4.66)	4.71 (4.12-5.11)
3-hr	1.36 (1.24-1.49)	1.64 (1.50-1.80)	2.06 (1.88-2.25)	2.39 (2.18-2.61)	2.86 (2.59-3.11)	3.23 (2.92-3.51)	3.63 (3.25-3.93)	4.04 (3.60-4.37)	4.61 (4.07-5.00)	5.07 (4.43-5.49)
6-hr	1.61 (1.48-1.77)	1.94 (1.78-2.13)	2.42 (2.22-2.65)	2.81 (2.57-3.07)	3.37 (3.06-3.66)	3.82 (3.46-4.15)	4.31 (3.87-4.67)	4.83 (4.30-5.22)	5.56 (4.90-6.01)	6.16 (5.38-6.65)
12-hr	1.89 (1.74-2.08)	2.27 (2.08-2.50)	2.81 (2.57-3.09)	3.26 (2.97-3.57)	3.90 (3.54-4.26)	4.43 (4.00-4.83)	5.00 (4.48-5.44)	5.61 (4.98-6.08)	6.48 (5.68-7.02)	7.18 (6.24-7.79)
24-hr	2.19 (2.02-2.39)	2.62 (2.42-2.86)	3.22 (2.97-3.51)	3.72 (3.42-4.04)	4.42 (4.05-4.80)	5.00 (4.55-5.43)	5.61 (5.08-6.09)	6.25 (5.62-6.81)	7.15 (6.38-7.81)	7.88 (6.97-8.63)
2-day	2.53 (2.34-2.74)	3.02 (2.80-3.28)	3.69 (3.41-3.99)	4.24 (3.91-4.59)	5.01 (4.60-5.43)	5.64 (5.15-6.12)	6.30 (5.72-6.84)	6.98 (6.31-7.60)	7.94 (7.09-8.68)	8.71 (7.70-9.57)
3-day	2.72 (2.52-2.94)	3.24 (3.01-3.50)	3.95 (3.66-4.26)	4.52 (4.18-4.88)	5.32 (4.90-5.75)	5.97 (5.48-6.46)	6.65 (6.06-7.20)	7.35 (6.66-7.97)	8.32 (7.47-9.07)	9.09 (8.08-9.96)
4-day	2.90 (2.70-3.13)	3.46 (3.22-3.73)	4.21 (3.91-4.53)	4.80 (4.45-5.18)	5.64 (5.20-6.08)	6.31 (5.80-6.81)	7.00 (6.40-7.56)	7.71 (7.02-8.35)	8.70 (7.84-9.46)	9.48 (8.47-10.4)
7-day	3.48 (3.24-3.74)	4.14 (3.85-4.45)	5.01 (4.66-5.38)	5.71 (5.29-6.12)	6.68 (6.17-7.17)	7.47 (6.87-8.02)	8.27 (7.57-8.90)	9.11 (8.29-9.83)	10.3 (9.26-11.1)	11.2 (10.00-12.2)
10-day	3.97 (3.72-4.25)	4.71 (4.42-5.04)	5.63 (5.28-6.02)	6.37 (5.96-6.81)	7.38 (6.88-7.88)	8.18 (7.60-8.73)	8.99 (8.32-9.61)	9.82 (9.04-10.5)	10.9 (9.99-11.8)	11.8 (10.7-12.8)
20-day	5.53 (5.22-5.85)	6.52 (6.16-6.91)	7.65 (7.22-8.10)	8.53 (8.05-9.04)	9.71 (9.12-10.3)	10.6 (9.95-11.2)	11.5 (10.7-12.2)	12.4 (11.5-13.2)	13.5 (12.5-14.4)	14.4 (13.2-15.4)
30-day	6.92 (6.55-7.31)	8.14 (7.71-8.60)	9.45 (8.94-9.97)	10.4 (9.87-11.0)	11.7 (11.0-12.4)	12.6 (11.9-13.4)	13.5 (12.7-14.3)	14.4 (13.5-15.3)	15.5 (14.5-16.5)	16.3 (15.2-17.4)
45-day	8.82 (8.37-9.29)	10.4 (9.83-10.9)	11.9 (11.3-12.5)	13.0 (12.4-13.7)	14.5 (13.7-15.2)	15.5 (14.7-16.4)	16.5 (15.6-17.4)	17.4 (16.4-18.4)	18.6 (17.4-19.7)	19.4 (18.1-20.6)
60-day	10.7 (10.1-11.2)	12.5 (11.8-13.1)	14.2 (13.5-15.0)	15.5 (14.7-16.4)	17.2 (16.2-18.1)	18.4 (17.4-19.4)	19.5 (18.4-20.6)	20.6 (19.4-21.7)	21.9 (20.5-23.2)	22.8 (21.3-24.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Estimates from the table in CSV format: Precipitation frequency estimates | Submit

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Secondary Containment Methods

- Passive measures = fixed, permanent containment structure which requires no action

- Active measures = requires deployment or action to be taken

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SPCC Common Containment Issues

- Insufficient secondary containment
  - Not aware of requirements
  - Not understanding “General” vs. “Sized”
- No means of monitoring interstitial spaces of double-walled tanks
- Sufficient freeboard not adequately addressed
- Issues with containment area
  - Containment valves left open
  - Cracks in containment walls
  - Oil present in containment area
  - Not sufficiently impervious
- **Documentation of containment capacity with freeboard**

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Common Secondary Containment Questions

- **Wastewater treatment systems and oil/water separators**
  - Must be adequately sized and have means to shutoff discharged
  - Not SPCC-regulated unless used as secondary containment
- **Buildings**
  - Must be “sufficiently impervious”
  - Check for floor drains
- **Double-walled tanks**
  - Must be shop-fabricated
  - Have means to monitor interstitial space (sight gauge or sensor)
  - Must have overfill prevention measures
    - Overfill alarm or flow shut-off OR
    - Adequate general secondary containment for most likely quantity from tank vents

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Qualified Oil-Filled Operational Equipment (OFOE)

- General secondary containment required unless qualifications met and facility elects to comply with alternative requirements
- Qualification Criteria:
  - Facility has no single discharge from OFOE >1,000 gal or 2 discharges > 42 gal each within a 12-month period in the 3 years prior to SPCC Plan certification date
- Alternative requirements:
  - Implement a monitoring program to detect equipment failure/discharge
  - Include the following in your SPCC Plan (unless you have submitted a Facility Response Plan under 112.20)
    - An Oil Spill Contingency Plan in accordance with 40 CFR Part 109
    - A written commitment of manpower, equipment, materials, required to expeditiously control and remove any quantity of oil discharged that may be harmful

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SPCC Training of Personnel

- Conduct annual training for all personnel that handle SPCC materials
- Can be combined with training for other facility plans
- Conduct spill kit deployment exercises if required
- MUST be documented

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When does my SPCC plan need to be updated?

- Whenever there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge.
  - Technical amendment must be P.E. certified
- An amendment must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.
- Administrative amendments (any amendment that is not technical) not required to be P.E. certified

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What is the 5-year review requirement?

- NOT a catch-up for missed technical amendments
- NOT an expiration of the P.E. certification
- The five-year review is to determine if **more effective prevention and control technology** has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge.
  - If YES, amend the plan within six months of review
  - If NO, no change required, no P.E. cert required
- DOCUMENT the review and results in a review log with the plan

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SPCC - Common Violations

- Outdated SPCC Plan – or no plan!
- Incomplete or inaccurate site map (with all oil sources)
- Tank inspections are not documented
- Lack of integrity testing (per applicable tank standards/schedule)
- Insufficient secondary containment (for bulk storage containers)
- Lack of management approval and commitment
- Lack of certification by a Professional Engineer (for facilities > 10,000 gallons of oil storage)
- Failure to address or cross-reference all sections of 40 CFR Part 112
- Lack of contingency plan when required

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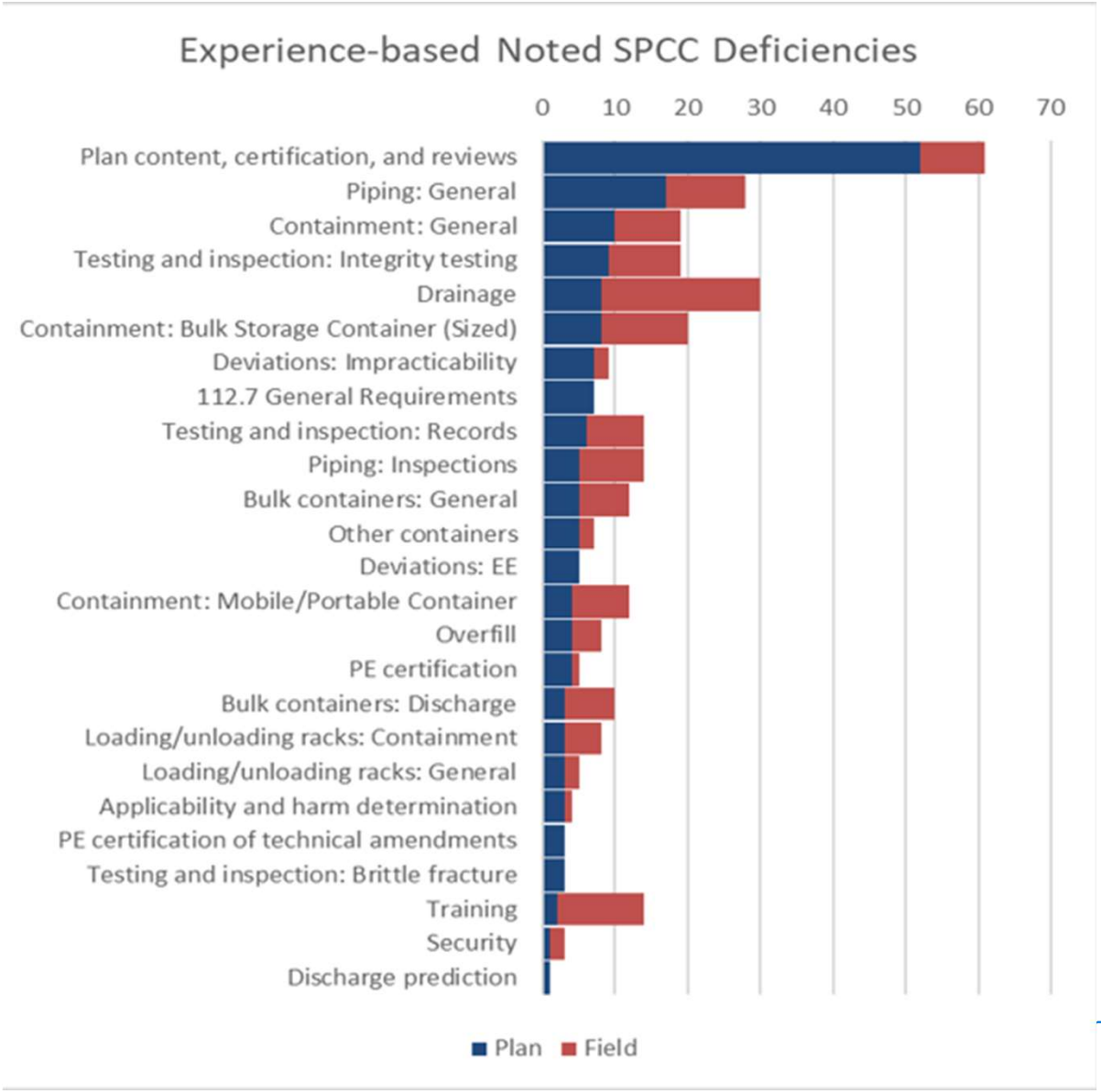

US EPA Fact Sheet Summary

- Most common SPCC deficiencies
  - Inadequate documentation of every 5-year review
  - No review/stamp by PE
  - Facility diagrams/map missing information
  - Secondary containment (general and sized) demonstration
  - Integrity testing not addressed thoroughly

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Ensure Compliance

- Read your SPCC Plan – seriously!
- Make the sure the oil inventory (tanks, drums, totes, oil-filled equipment, etc.) is consistent between these three documents:
  - Written SPCC Plan
  - SPCC Site Map
  - Routine SPCC Inspection Checklist
- Inspection containment areas
  - Drainage valves **closed**?
  - Significant cracks? – "does the containment hold water?"
- Organized recordkeeping is still key
  - Visual inspections
  - Integrity testing reports
  - Dike drainage logs
  - Training records
- Substantial harm certification is completed and signed
- SPCC Plan is signed by management and P.E. (>10,000 gallons)
  - Self-certification is **NOT** allowed in KY

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US EPA Guidance for Regional Inspectors

- Detailed applicability information
- Example SPCC plans
- Example forms

National Pollutant Discharge Elimination System

Industrial Stormwater Programs and Stormwater Pollution Prevention Plans

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Industrial Stormwater Permit – 3 Types of Regulatory Coverage

General Permit	Facilities with categories of industrial activity which are subject to NPDES permitting (40 CFR 122.26)
Individual Permit	Facilities with individual NPDES permit for other discharges OR subject to national effluent guideline for stormwater discharges
No Exposure Certification (NEC)	Exempted facilities which are subject to NPDES permitting, however, there is “no exposure” to industrial activity

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Permitted Facilities - Key Permit Requirements

- Stormwater Pollution Prevention Plan (SWPPP)
  - Site Map and General Location Map
  - Discharge/Sampling Locations (Outfalls)
  - Pollutant Source Assessment
- Control Measures and Best Management Practices
- Routine Facility Inspections
- Stormwater Monitoring
  - Visual Assessment
  - Benchmark Monitoring (if applicable)
  - Effluent Limit Monitoring (if applicable)
- Corrective Actions

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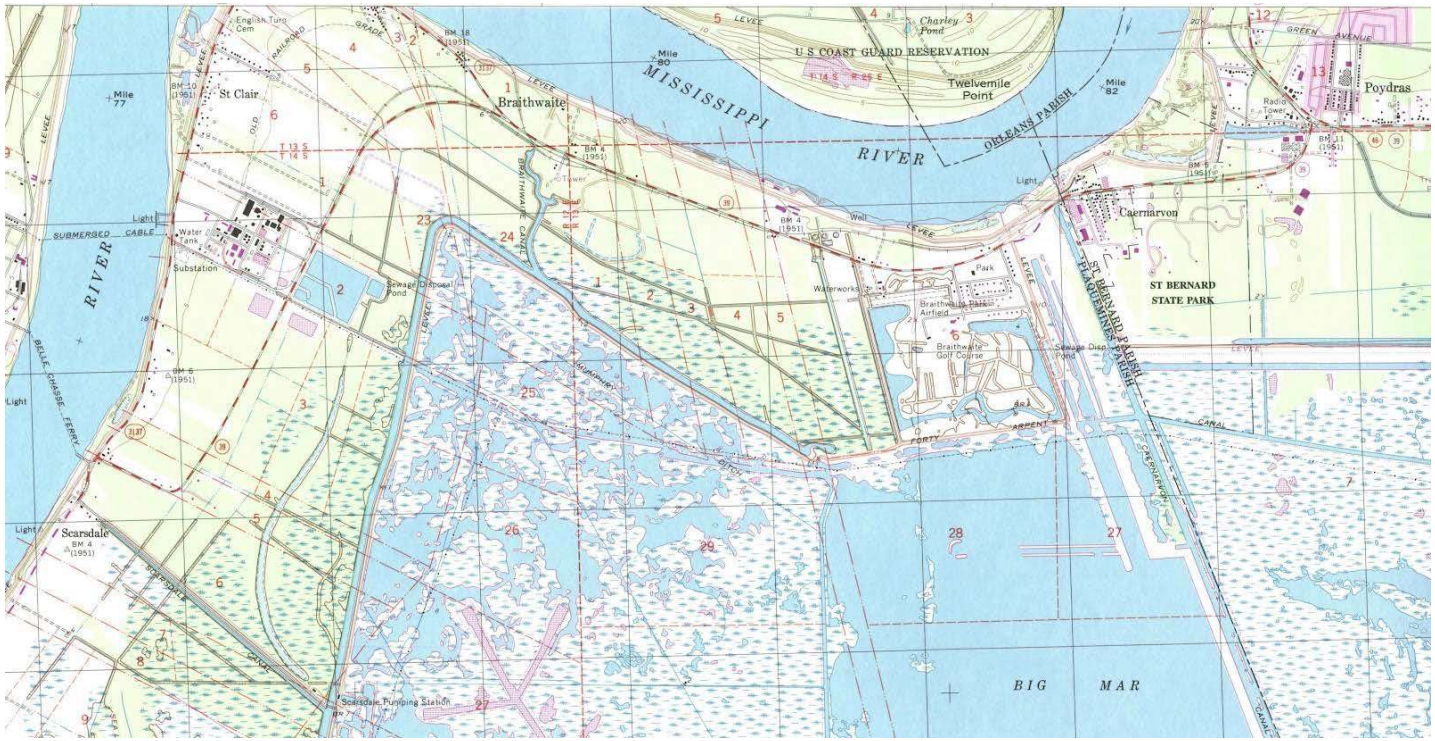
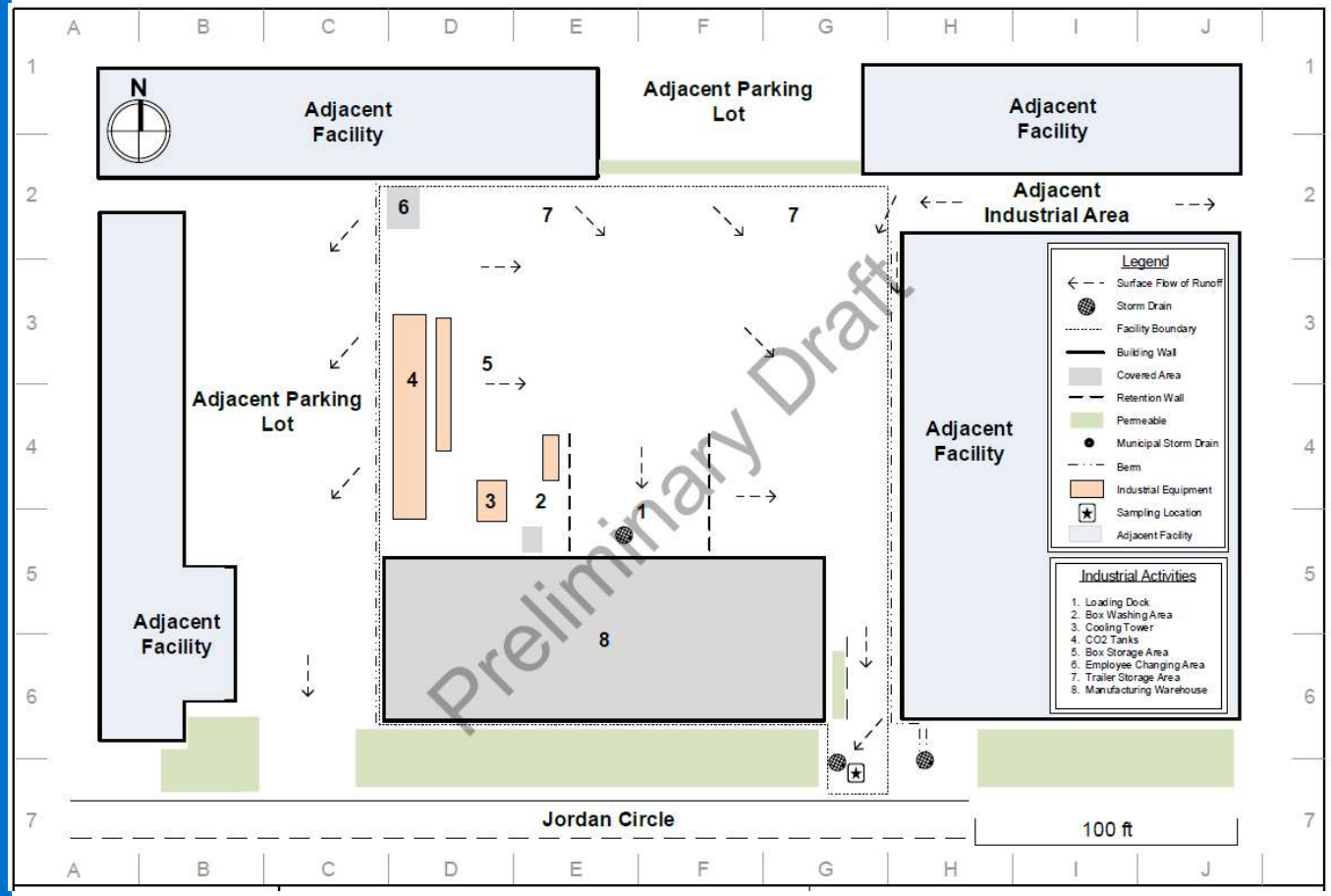
SWPPP General Location Map Example



SWPPP - Site Map Elements



- Facility Boundaries
- Buildings / Structures
- Pollutant Sources / Industrial Activities
- Stormwater Flow Direction
- Drainage Areas
- Conveyance Structures
- Discharge Locations
- Soil Erosion Areas
- Outdoor Storage Areas
- Sampling Points

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SWPPP Summary of Potential Pollution Sources

- Describe areas at your facility where industrial materials or activities are exposed to stormwater
- For each area identified –
  - List of industrial activities exposed to stormwater
  - Pollutants that could be exposed to precipitation and discharges
  - Where potential spills and leaks could occur
  - Unauthorized non-stormwater discharges evaluation
  - Sampling data to be collected

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Control Measures and Best Management Practices (BMPs)

- Exposure Minimization
  - Structural Controls
  - Location of pollutant sources
  - Storm-resistant coverings
- Good Housekeeping
- Preventative Maintenance
- Spill & Leak Prevention Plans
- Material Handling & Waste Management
- Erosion & Sediment Controls
- Management of Run-off/Run-on
- Employee Training
- Dust Generation/Vehicle Tracking of Industrial Materials
- Quality Assurance & Recordkeeping
- Storm Water Containment & Discharge Reduction
- Treatment Control

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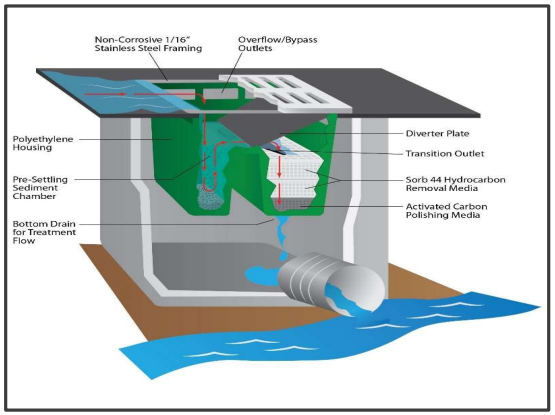
Control Measures - Examples

Downspout Filter

Stormwater Wattles



Catch Basin Filter

Secondary Containment / Dikes / Berms

Tarps / Covers

Industrial Vacuum

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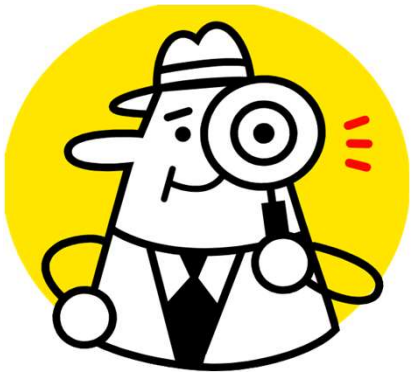
SWPPP Procedures – Inspections and Assessments

- Routine (monthly) visual facility inspections by trained staff
- Periodic inspections of outfalls, some states require analytics
  - Carefully read permit for submittal schedule of sampling
  - Sample early!
- Document any items found on inspections are corrected promptly



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Monitoring Requirements

- Types of monitoring (varies by state and SIC)
  - Visual Inspections
  - Benchmark Monitoring
  - Effluent Limit Monitoring
- Frequency may be quarterly, monthly, semiannually
- Discharge Monitoring Reports (DMRs)
  - KY GP – Submit by 7/28 and 1/28 each year
  - OH GP – Benchmark and Effluent Limit monitoring submitted monthly; Visual inspections not required to be submitted

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Ensuring Compliance

- Read your SWPPP and your permit!
- Make the sure the exposed significant material list is consistent between site map, inspection list, and document
- Check your outfalls for signs of spills or contamination
- BMPs being properly maintained?
- More records
  - Routine visual inspections
  - Outfall visual inspections
  - **Signed** non-stormwater discharge evaluation
  - Monitoring records and associated Discharge Monitoring Reports
  - Annual site assessment in KY / Annual Reporting Form in OH
  - Training records
  - NOI/permit coverage
  - SWPPP is signed by management
    - Contacts in the SWPPP are current

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SWPPP and SPCC Plan Sustainability

- Plan is easy to maintain and keep updated
  - Use tables to summarize oil inventories and exposed significant materials
  - Required inspections, testing, monitoring, etc. are clearly identified
- Easily transferrable to new EHS personnel
- Plan does not require constant revisions
  - Not too specific, but specific enough to meet the regulatory requirements
  - Avoid generic language that can be misinterpreted
    - Wrong: “Site personnel regularly receive SWPPP training.”
    - Better: “All oil-handling personnel receive annual SWPPP training.”

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Questions?

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Stephanie Miller is a senior environmental consultant with Trinity Consultants' Columbus, Ohio office. She began her career with Trinity in Pittsburgh in 2014, where she served a number industry sectors throughout Pennsylvania, West Virginia, and Ohio. Stephanie's experience includes air permitting and compliance, air dispersion modeling, Environmental Management Information Systems (EMIS), Spill Prevention Control and Countermeasure (SPCC), Toxic Release Inventory (TRI), and a number of other environmental specialties. Her work encompasses a wide variety of industries, including oil & gas, metal manufacturing, chemical manufacturing, among other manufacturing industries. Stephanie earned a Master of Science degree in Environmental Science from the University of Cincinnati, where she conducted research on drinking water treatment at the U.S. EPA. She earned a Bachelor of Science degree in Biology from Kent State University.

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