



Implementation of the Storm Water Pollution Prevention Plan (SWPPP) for the Public Utilities Maintenance Facility



TRAINING SESSION

City of Portsmouth
Department of Public Utilities

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Training Overview

- Purpose of the SWPPP
- Pollution Sources and Best Management Practices
- Types of Spills
 - What to do in case of a spill
- SWPPP Team and Responsibilities

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Purpose of the SWPPP

- Provides City staff with the tools to reduce pollutants contained in stormwater discharges to levels that comply with the requirements of the General Storm Water Permit issued by the State of Virginia
- Helps the City ensure compliance with the requirements of the MS4 permit
 - Avoid fines
 - Minimize stress

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Overall Goal


Only clean stormwater leaves public utilities in the storm drain system





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Key Sources of Potential Pollution


Accidental fuel, oil, or hydraulic leaks from vehicles in parking/storage areas



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Key Sources of Potential Pollution

Runoff from material storage containers or improperly stored equipment



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Key Sources of Potential Pollution



Sediments from unpaved areas of the site or brought onto the facility with equipment

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Best Management Practices

- Procedures and physical controls put in place to minimize pollutants in stormwater leaving the facility
 - Behavioral Controls (*Housekeeping*)
 - Physical Controls
 - Inlet filters
 - Settling ponds
 - Absorbent materials
 - Silt fence
 - Intentional vegetation
 - Stone or gravel


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Behavioral Controls - Housekeeping

<p><u>Indoors</u></p> <ul style="list-style-type: none">• Use available spill equipment to manage small spills• Wash down pavement into internal storm drains, not out the doors• Inspect tanks, lines and drums for leaks each month• Sweep grinding/cutting debris and dispose in trash cans	<p><u>Outdoors</u></p> <ul style="list-style-type: none">• DO NOT store oil filled equipment outside• Cover bulk containers when they are not being loaded• Work on vehicles indoors as much as possible• Thoroughly clean area when work must be done outdoors
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Physical Controls Examples



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Physical Controls Example

- Spill Kit Contents:
 - 55 gallon drum
 - Absorbent pads
 - Socks and boom
 - Disposable bags
 - Oil resistant gloves



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Minor Spill - Definition

a. Minor Spill Response


A "minor" spill response is defined as one that poses no significant harm to human health or the environment. These spills involve generally less than 25 gallons and can be cleaned up by facility personnel. Other characteristics of a minor spill consist of the following:


- i. The spilled material is easily stopped or controlled at the time of the spill
- ii. The spill is localized
- iii. The spilled material does not reach surface water or groundwater
- iv. There is little danger to human health
- v. There is little danger of fire or explosion

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Minor Spill - Action

- Stop any fluid spills immediately
- Use Sphag Sorb to clean up oily residue and small spills
- Use spill kit for larger spills/accidents






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Minor Spill – Procedure

MINOR SPILL RESPONSE	
Step 1	Immediately notify the senior person on-site
Step 2	Under the direction of the senior person on-site, contain the spill with the spill response materials and equipment
Step 3	Remove all visibly impacted soils and spill response materials within 24 hours of discovering the release
Step 4	Place spill debris in properly labeled waste containers
Step 4	Complete the top half of the Spill Notification Report (Appendix 7) and send to the Manager of Stormwater Compliance immediately.



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Major Spill - Definition

a. Major Spill Response (Spill Emergency) 40 CFR 112.7(a)(3)(vi)


A "Spill Emergency" is defined as one involving a spill that cannot be safely controlled or cleaned up and will typically involve greater than 25 gallons. Characteristics include any of the following:

- i. The spill is large enough to spread beyond the immediate spill area or greater than 25 gallons
- ii. The spilled material passes into the storm sewer (regardless of size)
- iii. The spill requires special training and equipment to clean up
- iv. The spilled material is dangerous to human health; or

There is a danger of fire or explosion



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Major Spill - Action

- Stop any fluid spills immediately
- Deploy absorptive material (socks, pillows, pads) to inlets, ditches adjacent to the spill site
- Call the Stormwater Compliance Manager and 911



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Major Spill - Procedure

MAJOR SPILL RESPONSE	
Step 1	Immediately notify the senior person on-site
Step 2	All workers will immediately evacuate the spill site and move to a safe location
Step 3	A senior person on-site will call for medical assistance if workers are injured
Step 4	Notification: Complete as much of the Spill Notification Report located in Appendix 7 as possible at this point in the response and then make the following notifications:
Step 5	Immediately notify the local Fire Department at 911
Step 6	Contact the Manager of Stormwater Compliance at (757) 393-8592 to provide details regarding the spill
Step 7	For a spill >25 gallons that does not cause a sheen or otherwise impact surface water, the Manager of Stormwater Compliance will immediately contact the VDEQ Tidewater Regional Office at (757) 518-2000 and the National Response Center at (800) 424-8802.
Step 8	The Manager of Stormwater Compliance will coordinate cleanup and seek assistance from a cleanup contractor as necessary.



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Major Spill - Reporting

- Spills to soil in excess of 25 gallons must be reported to DEQ within 24 hours of discovery
- Spills to waters/wetlands of any amount must be reported to DEQ immediately upon discovery
- Spills in excess of 25 gallons to soil or to waters must also include a 5-day follow up-letter to DEQ
 - Include description of the nature and location of the discharge, cause of the discharge, date, duration of discharge (if stopped), expected duration (if continuing), volume (if stopped), and expected volume (if continuing).
 - Any steps planned or taken to reduce, eliminate and prevent a recurrence of the discharge or any future discharges not authorized by the permit



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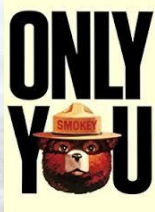
SWPPP Team

Facility Manager

- Public Utilities Director

City Coordinators

- Stormwater Compliance Manager (Ved Malhotra)
- Kimley-Horn



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Stormwater Compliance Manager Responsibilities

- Oversight
 - Quarterly routine inspection
 - Quarterly visual monitoring inspection
 - Annual comprehensive facility compliance inspection

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Quarterly Routine Facility Inspection

- Quarterly inspection of the yard for evidence of spills, leaks, or discharges of material other than stormwater from outfalls
- Review stormwater protection measures to ensure they are available, in place, and/or functioning
- 1 of 4 inspections must occur during a qualifying rain event
- Check for correct storage of materials and general housekeeping
- Results from each Routine Facility Inspection are to be kept in the SWPPP in Appendix 4



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Quarterly Visual Monitoring Inspection

- Must occur after the outfalls begin discharging and within 30 minutes of the onset of rainfall
- Rainfall event triggering the inspection must occur at least 72 hours since last rainfall
- Outfalls are inspected for stormwater:
 - Color, odor, foam, oil sheens, other obvious indicators of stormwater pollution
- Results of inspection kept in SWPPP in *Appendix 4*



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Annual Comprehensive Facility Compliance Evaluation

- Performed once per year
- "Audit" of the facility activities, monitoring, reporting and SWPPP record keeping
- Corrective actions identified during the Comprehensive Facility Compliance Evaluation shall be undertaken as soon as practicable
- Changes to the SWPPP resulting from the Comprehensive Facility Compliance Evaluation will be made within 30 days of the findings
- Comprehensive Facility Compliance Evaluation forms are to be kept in *Appendix 4*



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General Staff Responsibilities

- Ensure installed stormwater protective measures (covers, grates, filters) are properly replaced, following removal to perform work
- Manage and stop spills (drip pans, emergency shut-offs, spill kits)
- Report any spills observed on the facility to your supervisor
- Protect chemicals, fuels, lubricants, and any other stored materials from rainwater
- Supervise material pick-ups and deliveries



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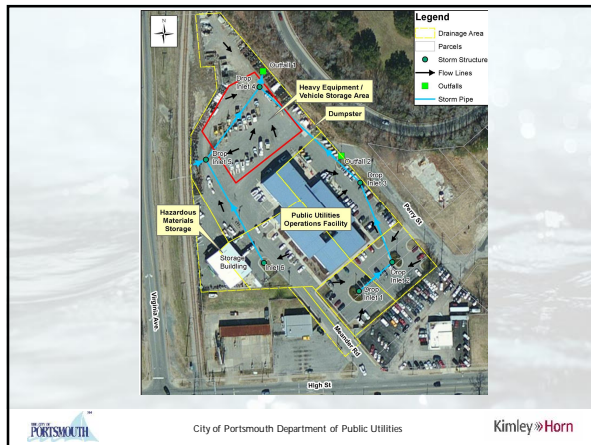
The Public Utilities Facility: Overview

- Two major drainage areas
 - One sheet flow area
 - One area with point source discharges
- Five inlets to subsurface drainage features
- One point source discharge
- One aboveground generator stored outside the building
- One bulk chemical storage building
- Large parking and storage areas



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Stormwater Inlets




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What We've Seen Today



- An overview of why we've put the SWPPP in place
- Pollutant Sources and Prevention
- Spill Clean-up and Reporting
- SWPPP Team and Responsibilities



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QUESTIONS?



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