

STORM WATER QUALITY

SPIILLS & CLEAN UP METHODS

CITY OF OKLAHOMA CITY



Preparing Spill Response Procedures


- Spill response procedures should be developed to **Stop**, **Contain** and **Clean Up leaks & spills** when they occur.
- Your facility's procedures should outline:
 - Chemical Inventory & Storage
 - Spill kits, cleaning supplies, PPE
 - Training on spill response and clean up methods
 - Cleanup contractor for larger spills if needed
 - Personnel for spill response
 - How to document / report spills and leaks
 - Notify appropriate agencies for hazardous spill



BE PREPARED BEFORE A SPILL OCCURS

Employee Training

- Designated employees should be trained on spill response procedures and appropriate cleanup methods. (Pollution Prevention Team)
- Maintain a list of personnel responsible for implementing your spill response procedures in the event of a spill, such as:
 - Name
 - Title
 - Phone Number
 - Additional Contact information



"Before anything else, preparation is the key to success."

~ Alexander Graham Bell

BE PREPARED BEFORE A SPILL OCCURS

Routine Facility Inspections

- Routinely inspect key areas:
 - Chemical storage areas
 - Look for leaks and spills
 - What potential hazards exist?
 - Dikes, berms, and other secondary containment devices
 - Replace or repair any damaged devices
 - Leak detection equipment
 - This must also be tested periodically, per manufacturer's specifications
 - Spill kit supplies & inventory
- Document these inspections into your SWP3!



BE PREPARED BEFORE A SPILL OCCURS



Quarterly visual samples

- When sampling notice the items & materials that could be exposed to rainfall. Ask yourself:
 - What's coming off my property?
 - Where do these outfalls lead to?
 - What is my receiving water body?
 - If a spill occurred during a storm event are we prepared to handle it?
 - What will I do if a spill leaves the property?
- If your facility is required to have a Spill Prevention, Control and Countermeasures Plan (SPCC), make reference to the SPCC plan in your SWP3.

PREPARE FOR THE WORST

What will you do if there's a Major Catastrophe?

- Fire?
- Tornado?
- Earthquake?
- Lighting Strike?
- Keep a current copy of your SDS sheets and your chemical inventory off site, in case you can't get to your office.

ARE YOU
PREPARED?

When A Spill Occurs...



Will you be Prepared?

REPORTABLE QUANTITIES

CAUTION

- Whom do you report to?:
 - National Response Center 800-424-8802 [EPA-Federal]
 - Oklahoma Dept. of Environmental Quality 800-522-0206 [State]
 - Local Emergency Planning Committee (LEPC) [County]
 - Oklahoma County 405-713-1044
 - Canadian County 405-651-6600
 - Cleveland County 405-321-8600
 - Oklahoma City Storm Water Quality 405-297-1774 [Local]
 - 24-hour Emergency: 405-990-6833
 - Spills to sanitary sewer must be reported to OKC Utilities –Wastewater Quality 405-297-3805 (297-0334 after 5pm M-F; 297-2255 weekends and holidays)
- Reportable = Releases of a hazardous substance as listed in 40 CFR 302.4
- Example: Fuel Spills – Gasoline, Diesel
 - Any amount into water must be reported
 - Spills onto concrete or asphalt that are completely contained do not need to be reported
 - Spills onto land of 25 gallons or more must be reported

Initial Assessment



- Where did the spill originate?
- What was spilled?
 - Is the spill hazardous?
 - Fumes, Noxious Odors, chemical reactions
- Refer to SDS sheets
 - Section 6: Accidental Release Measures
 - Provides recommendations on the appropriate response to spills, leaks or release.
- How much material was released?
 - Can ONE spill kit handle the volume spilled?
 - Does a cleanup contractor need to be called?
 - Did it get off site or enter a storm drain?
- Start a Corrective Action Report!!

Containment!



- Stop the leak at its source
- Use spill kit material to stop the release from spreading, if possible
 - Booms, dirt dikes & absorbent materials

- Protect storm drains and other outlets.
 - Divert material away from drains
 - Cover / Seal drains in the area
- Train employees!
 - Location of spill kits
 - How to respond and use spill kit materials





More Examples!

It's Time to Clean Up

Once you have stopped and contained the spill, clean up procedures can begin.

- Use dry cleanup methods whenever possible (dry absorbents / pads)
 - Be sure to sweep / pick up dry absorbents used to collect spilled material.
- When using dry absorbents start from the outer edges and work your way into the center of the spill.
- Apply absorbent materials until no more wet spots are visible.
- Granular materials only needs to sit for a few minutes before being collected.
- Properly dispose of all absorbent materials used.

If a spill was made off-site, into a storm drain, ditch or waterbody, contact a cleanup contractor for assistance immediately.

Be sure to inform your Storm Water Quality Inspector of any spills that make it off-site or into the MS4.

Never hose down a spill into
a drain or offsite!



Soil Remediation

- Identify chemicals of concern
- Consider human health, ecological concerns, land use and ground water protection
- May need to remove and replace soil
 - Proper disposal of contaminated soil
- May require DEQ involvement
 - Land Protection Division
- Work with your inspector to determine what needs to be done



MITIGATION AGENTS

- Hydrocarbon Mitigation Agents can be used to clean oil and grease spills
 - Check with manufacturer to determine product capability
 - Hydrocarbons (fuels, oils)
 - Food grease



- Mitigation agents should be:
 - Properly diluted (3%-6% for standard application),
 - Scrubbed in with a broom, and
 - Runoff should be collected for proper disposal.

Disposal of Absorbent Materials

- Absorbent materials take on the same characteristics as the materials it was used to absorb.
 - May be considered a hazardous waste.
- Used absorbent material should be properly disposed of:
 - Notify your local landfill to see if they can accept the materials.
 - Work with cleanup contractor to dispose of hazardous materials.
 - Reusable absorbents can be cleaned by an industrial cleaning company.
 - Dispose according to federal, state and local regulations.



After the Cleanup

- Decontaminate and restock supplies for spill kit
 - Clean all tools and reusable materials properly before reuse
 - Restock spill supplies to ensure materials are available for the next incident
- Review spill plans, procedures, SPCC & SWP3
 - What worked? What didn't work?
 - Are emergency contacts correct?
 - BMP's effective?
 - Document & update SWP3 as needed.
 - Report & Document the incident
- Corrective Action Report completion



QUESTIONS?



For more information:

WWW.okc.gov/SWQ