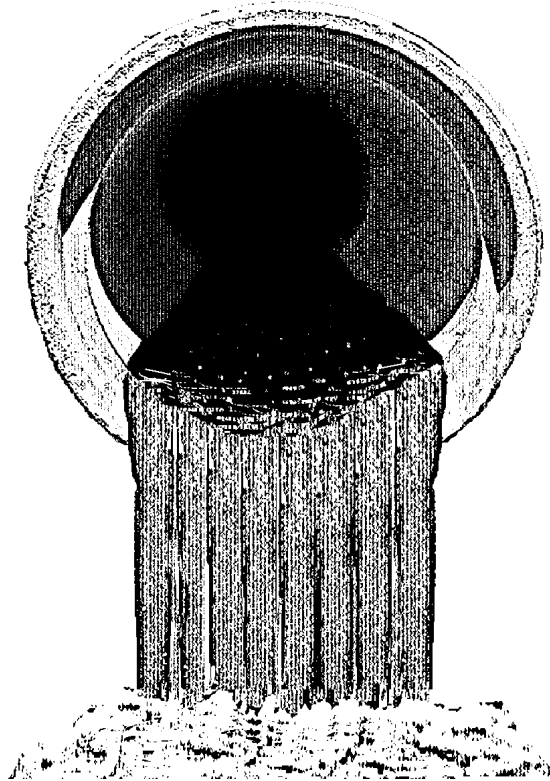


# **CHAPTER THREE**

## **Spills and Storm Water**

**Spill Control - Prevention and Clean Up 37**

**Storm Water Management 39**



## **Spill Control - Prevention and Clean Up**

Spills are a major contributor to environmental damage that can occur at your facility. Many spills are caused through improper storage and management of fluids and other hazardous wastes. Spilled waste fluids can pollute soils, ground water, surface waters and wetlands, affect air quality and harm people and wildlife.

### **Spill Training**

1. Develop a contingency plan for your facility which includes:
  - ✓ Emergency Phone Numbers: Fire Departments, Ambulance, Hospital, DNREC, etc.
  - ✓ Evacuation Routes from buildings and facility
  - ✓ Designate Response Team members and on-site team leaders
  - ✓ Home and office numbers for supervisor's or facility managers
  - ✓ List of Emergency Equipment and Location
  - ✓ List of Chemicals and/or Hazardous Materials on-site and their locations
2. Train all employees to quickly respond to different kinds of spills.
3. Practice emergency scenarios.

### **Spill Clean-up Procedure**

1. Clean up spills right away!
2. Place absorbent materials such as pads and granular absorbents on spill.
3. Containerize used absorbent materials and dispose of properly.
4. Materials such as sand, dirt, and booms can be used to divert and contain spills on your property.
5. Place recaptured and containerized liquids in some type of secondary containment such as drums, livestock water troughs, or children's pools.
6. Do not use water to dilute spills or wash spills into storm or sanitary sewers or septic systems.

### **Types of Equipment for Immediate spill clean-up**

1. Safety equipment for employees include: chemical resistant gloves and coveralls, safety glasses, and boots.
2. Absorbent material for soaking up oils and solvents: Industrial spill clean-up products such as pads, booms and granular absorbents such as OilDri, Pig blankets, etc.
3. Containers to hold spilled waste: drip-pans, pails and drums.
4. Shovels and scoops to clean-up granular absorbents for disposal into drums.
5. Storm drain covers for prohibiting a spilled material from entering the storm water conveyances

*Note: Locate spill control equipment and absorbent materials in a central location that is easily accessible to all employees.*

## **Report It!!**

You must immediately report the following spills to Department of Natural Resources and Environmental Control at (302) 739-5072 or 1-800-662-8802

- 🚒 All petroleum releases to surface or ground waters.
- 🚒 All discharges of 25 gallons or more of motor fuel, heating oil, used oil, or used petroleum substances.
- 🚒 All discharges of 150 gallons or more of other petroleum substances.
- 🚒 All abandoned containers.
- 🚒 All pollutants released to air with suspected health impact.
- 🚒 All pollutant or air contaminant releases requiring a cleanup.
- 🚒 Other environmental problems as necessary.

**The regulations “Reporting of a Discharge of a Pollutant or an Air Contaminant” are included in the Appendix.**

### **Some precautions to help prevent spills.**

- Store all waste fluids in closed and labeled containers to prevent spills. Check levels daily to prevent overflows and to determine if containers are leaking. Also, storage containers must be closed tightly so that hazardous fluids do not evaporate.
- Store all used absorbents in closed, covered leak-proof containers. Used absorbents that contain hazardous waste must be handled according to hazardous waste rules.
- Utilize storm drain covers for prohibiting a spilled material from entering the storm water conveyances.
- Do not stack drums or other waste-fluid containers.

**Additional information may be found in the Appendix: See the following documents:**

“Delaware’s Hazardous Waste Regulations and You”

Program Highlight: Conditionally Exempt Small Quantity Generator Program Requirements

**Figure 9. Leaking Drums.**



## Storm Water Management

Storm water management and spill prevention go hand-in-hand. The aim of both is to prevent waste fluids from being washed into the environment along with storm water run-off.

Contaminated storm water can pollute surface water, ground water and soil. This section offers specific steps to help your facility manage materials that can pollute storm water.

The State of Delaware requires all facilities engaging in industrial activity to apply for a storm water permit under the federal National Pollutant Discharge Elimination System (NPDES) rules. This permit requires facilities to develop and implement a plan to control storm water discharge from their facility.

At a minimum, a Storm Water Plan (SWP) must identify and describe the practices you will implement to fulfill the requirements of the regulations. The plan must also contain a schedule for the practices to be implemented by the facility and when you will implement each practice. The plan must identify employees who are qualified to inspect designated equipment and areas of the facility at appropriate intervals for compliance with the SWP. Records of these inspections must be maintained in a log along with a description of follow-up procedures used to ensure that appropriate actions were taken to correct deficiencies identified during inspections. There are three options from which to choose in order to comply with Delaware Stormwater Regulations:

**(Option #1)** Management of Significant Material by Enclosure.

This means all Significant Material is enclosed at all times. A facility has 5 years to implement this option.

**(Option #2)** Management of Significant Material by a Combination of Protocols and Discharge Buffering.

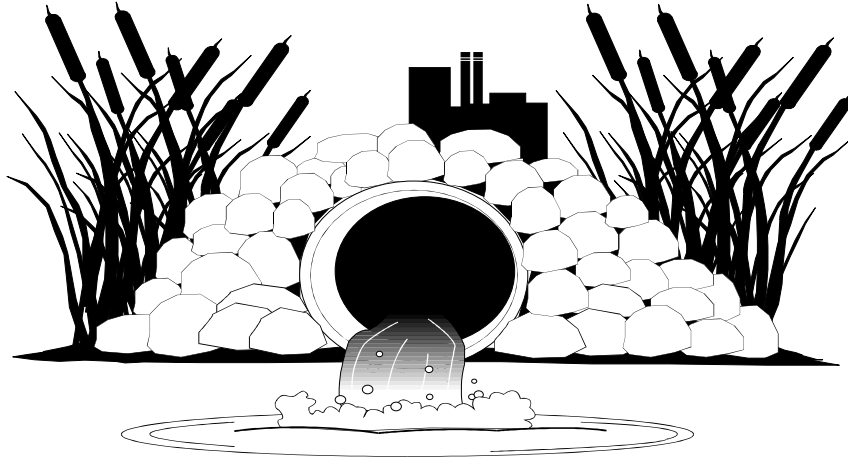
This means a facility will implement non-structural controls in order to minimize exposure of Significant Materials. The facility will also include a storm water management structure (e.g. sand filter, a wet pond) at the facility. A facility has 3 years to implement this option.

**(Option #3)** Alternative Approach for Managing Significant Material

A facility may choose to implement an alternative approach for storm water management. The facility must identify and describe in the SWP, the practices which will be implemented as the alternative approach. The alternative approach must reduce the amount of pollutants transported off site by storm water discharges from the facility to a **level comparable** to Option #1 or Option #2. and must be implemented within a specific period of time. Any alternative approach must be approved in writing by the Department.

### **Inadequate Significant Material Management**

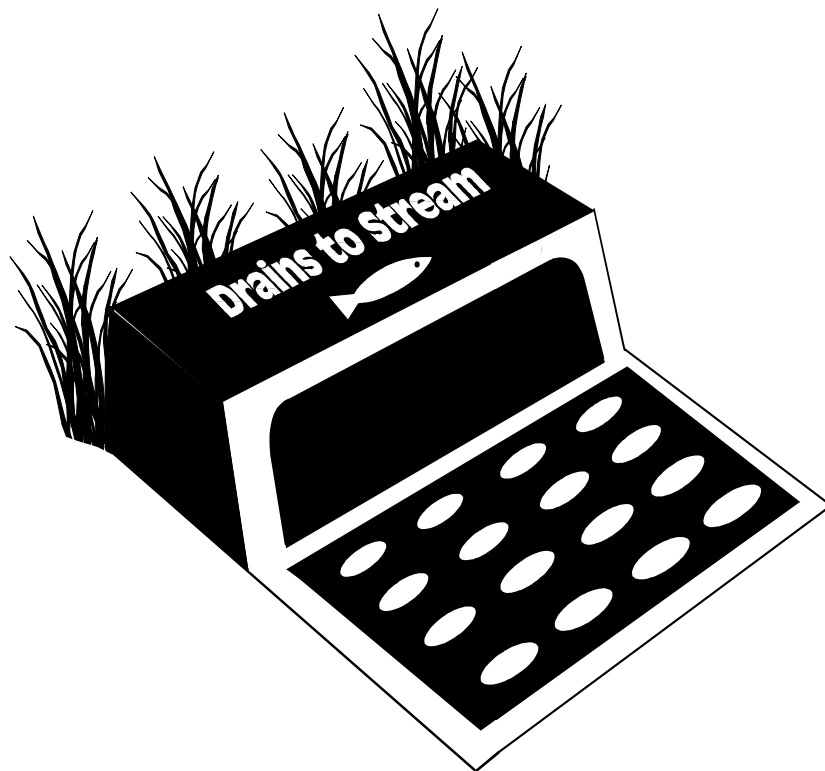
If the storm water discharges from a facility cause or contribute to impairment of surface waters of the state, an individual permit along with limits on concentration levels and treatment of the storm water discharges may be required. For more information, contact the Division of Water Resources, Storm Water Runoff Program at (302) 739-5731.



### **Applying For a Permit**

Copy and fill out the application for a Storm Water Permit as seen on Page 40.

Contact the Delaware's Division of Water Resources Storm Water Runoff Program for assistance in completing the permit application. The telephone number for the Storm Water Runoff Program is (302) 739-5731.



## References

Delaware Auto and Truck Recyclers Association (DATRA), John T. Fitzgerald, III  
P. O. Box 26, Lincoln, DE 19960

James Environmental Management, Inc., Michael R. James  
Provided Valuable Information and photographs  
2007 N. Mays, Suite 101, Round Rock TX 78664  
(512) 244-3681

Minnesota Pollution Control Agency  
Ground Water and Solid Waste Division  
Site Response Section  
520 Lafayette Road North  
St. Paul, MN 55155-4149

State of Delaware  
Department of Natural Resources and Environmental Control  
Division of Air and Waste Management and  
Division of Water Resources and  
Pollution Prevention Program  
89 Kings Hwy  
Dover, DE 19901

State of Delaware  
Fire Marshal's Office, Jim King  
1537 Chestnut Grove Rd.  
Dover, DE 19901

State of North Carolina  
Department of Environment and Natural Resources  
North Carolina Pollution Prevention Program  
512 North Salisbury Street  
Raleigh, NC 27611-7687

United States Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

## **Appendix**

### **Airbags**

Disposal of Air Bags in Scrap Vehicles

### **Hazardous Waste**

Salvage Yard Self-Inspection Form

Delaware Hazardous Waste Regulations and You

Delaware Hazardous Waste Transporter List, Feb. 1999

Managing Automotive Maintenance and Repair Waste

Program Highlight: Conditionally Exempt Small Quantity Generators Program Requirements

Concrete Liners for Hazardous Waste Tank Systems

### **Pollution Prevention**

Delaware P2 Program

A Pollution Prevention Guide for Automotive Repair Shops

A Pollution Prevention Guide for Metal Fabricators

### **Refrigerant**

June 1998 EPA Fact Sheet Recovering Refrigerant at Salvage Yards and Other Motor Vehicle

Disposal Facilities

### **Spills**

Reporting of Discharges