

## **Chapter 9: Spill Response and Prevention**

### **9.1 Introduction**

Spills pose a threat to the environment and create hazardous conditions for employees. Having a Spill Prevention, Control and Countermeasure Plan (SPCCP) and holding regular spill response training can save money, lives and limit environmental damage in the event a spill occurs.

Spill Prevention, Control and Countermeasure Plans should clearly state how to stop the source of the spill, how to contain and clean up the spill, how to dispose of contaminated materials, and how to train personnel to prevent and control future spills. The SPCCP should also list emergency notification information (EPA, TDEC, Montgomery County Emergency Management Agency and the Montgomery County Storm Water Coordinator at a minimum) and spill reporting requirements.

### **9.2 Applicability**

All construction sites, industrial and manufacturing operations, and maintenance sites that use or store hazardous materials must have a current SPCCP on site. Hazardous materials include pesticides, paints, cleaners, petroleum products, fertilizers, and solvents. See the Material Data Safety Sheets for more information on storing these materials.

### **9.3 Site and Design Considerations**

Identify potential spill or source areas, such as loading and unloading, storage and processing areas, places that generate dust or particulate matter, and areas designated for waste disposal. Also, spill potential should be evaluated for stationary facilities, including manufacturing areas, warehouses, service stations, parking lots, and access roads. Material handling procedures and storage requirements should be defined and actions should be taken to reduce spill potential and impacts on storm water quality. This can be achieved by:

- Recycling, reclaiming, or reusing process materials, thereby reducing the amount of process materials that are brought into the facility.
- Installing leak detection devices overflow controls, and diversion berms.
- Disconnecting drains from processing areas that lead to the storm sewer.
- Performing preventative maintenance on storm tanks, valves, pumps, pipes, and other equipment.
- Using material transfer or filling procedures that minimize spills from tanks and other equipment.
- Replacing toxic materials with less or non-toxic products.

Provide documentation of spill response equipment and procedures to be used, ensuring that procedures are clear and concise. Give step-by-step instructions for spill response at a particular facility. This spill response plan can be presented as a procedural handbook or a sign.

*Education is essential for reducing spills.* By informing people of actions they can take to reduce spill potential, spills will be reduced or prevented. Some municipalities have set up 1-800 numbers for citizens to call in the event of spills. This helps ensure that spills are cleaned up in a safe, proper, and timely manner.

#### **9.4 SPCCP Minimum Requirements**

The Spill Prevention, Control and Countermeasure Plan must include at a minimum the following information:

- The hazardous materials covered in the plan, including the reportable quantity for each hazardous material (measured in pounds if a solid and in pounds and gallons if a liquid)
- Any containment and diversionary structures or equipment (where appropriate)
- Inspection, maintenance and testing procedures for storage and containment areas
- A list of emergency response equipment which includes the locations of the equipment and a description of the capabilities of the equipment
- A description of programs that addresses both new employee training and regular routine employee training in spill prevention, actions to take in the event of a spill and evacuation plans.
- A description of discharge detection devices and emergency warning systems
- A list of on-site emergency coordinators and the qualifications of on-site trained employee responders
- A description of evacuation procedures and employee assembly points
- General response and clean-up protocols by substance or substance class
- Specific on-site containment, treatment or removal plans
- Procedures and contact information for reporting the incident to the appropriate agencies as required by local, State and Federal law, and procedures for supplying written reports to the Storm Water Coordinator
- A description of the record-keeping process for routine training for spill responses and responses to actual spill incidence

#### **9.5 Limitations**

A spill prevention and control plan must be well planned and clearly defined. A well conceived plan reduces the likelihood of accidental spills and helps speed an effective response if they occur. Training might be necessary to ensure that all workers can follow procedures. Equipment

and materials for cleanup must be readily accessible and clearly marked for workers to be able to follow procedures.

### **9.6 Maintenance Considerations**

Update the spill prevention and control plan to accommodate any changes in the site or procedures. Regularly inspect areas where spills might occur to ensure that procedures are posted and cleanup equipment is readily available.

### **9.7 Effectiveness**

A spill prevention and control plan effectively reduces the risk of surface and ground water contamination. However, to be effective, workers must be trained, materials and cleanup equipment available, and procedures followed.

### **9.8 Cost Considerations**

Spill prevention and control plans are inexpensive to implement, however, extra time is needed to properly handle and dispose of spills, which increases labor costs. *Preventing spills is always the least costly option.*