

## Chapter 6: Floor Drains



Retail automotive service stations should ensure that they use proper spill prevention and mitigation practices to prevent harmful liquids from entering their floor drains. They should also ensure that they know where their wastewater goes (e.g., septic system, dry well, holding tank, or municipal sewer), and that they are in compliance with all relevant requirements. This chapter helps you identify and understand the requirements and BMPs that apply to you.

### 6.1 Overview: Floor Drains

Floor drains are collection points that remove wash water and other liquid wastes from a work area through pipes or ditches for disposal. Improper disposal through floor drains can contaminate soil and ground water and threaten drinking water supplies. Thus, it is critical that you understand your discharge requirements and ensure that you have proper floor drain management practices in place.

Do you know where all of your facility's floor drains are located? Even if you think you know the answer, double-check all floor and baseboard surfaces in working areas, even surfaces underneath equipment. Floor drains could be open holes, or covered by a filter.

This chapter is written on the assumption that your facility has floor drains. If you do not have floor drains, you should still read it, as many of the provisions (e.g., spill prevention practices, "daylighting" requirements) are likely to apply to you. Section 6.2 provides guidance on floor drain management, including spill prevention and spill management. Section 6.3 provides guidance on the requirements associated with different methods of wastewater disposal.

### 6.2 Protecting Your Floor Drains

#### 6.2.1 Proper Shop and Floor-Drain Management

Other than proper spill prevention and spill management (discussed in 6.2.2, below), there are several steps that you can take to minimize the flow of chemicals and waste into floor drains:

- ✓ Chemical storage areas near floor drains should be surrounded by secondary containment, such as berms or dikes, to prevent accidental spills from reaching the floor drain.
- ✓ Permanently close unnecessary floor drains to prevent the accidental discharge of spilled hazardous materials (e.g., oil, antifreeze, solvent) to the environment.
- ✓ If floor drains in vehicle servicing areas cannot be closed permanently, securely plug them at times when vehicles are being serviced.
- ✓ Add grit removal and an oil/water separator to the floor drain.
- ✓ Keep hazardous materials or other synthetic fluid products in an area separate from where the floor drain is located, or in a system of secondary containment (e.g., within a larger container, or surrounded by a berm).

- ✓ Keep floors as clean as possible.
- ✓ Minimize and try to eliminate the use of water for floor cleaning.
- ✓ Make sure employees understand the facility's policies about disposal of chemicals and vehicle fluids, and post this information on signs near sinks and floor drains.

## 6.2.2 Spill Management

A spill is an accidental release of a hazardous material *to the environment*. An example of a spill is used oil falling on the surface of an impermeable garage floor and entering a floor drain leading directly to a dry well. An accidental release that is captured, contained, and recovered before it reaches the environment is not considered a spill.



Any spill of petroleum that results in a release of 2 gallons or more to the environment must be reported as soon as possible to the Waste Management Division (WMD) at 241-3888 during normal working hours or by calling the 24-hour emergency number at 244-8721 or 1-800-641-5005. Spills of hazardous materials **other than petroleum** must be reported if the environmental release exceeds 2 gallons **OR** poses a potential threat to health or the environment (regardless of the amount released).

If you are unsure whether a spill has occurred or when to report a spill, call WMD at 241-3888.

### What To Do In The Event Of An Accidental Release

1. Contain the flow of liquid by creating a barrier or channel. Prevent it from entering floor drains.
2. Recover the liquid for recycling if possible, otherwise properly dispose of it. Collect as much of the liquid as possible using an explosion-proof wet vac or squeegee. This will minimize the amount of material that has to be stored and disposed of as hazardous waste. If you rely on absorbents (e.g., speedi-dri, pads, "magic sorb"), use each as thoroughly as possible to reduce the volume of hazardous waste. Contaminated absorbents must be properly disposed of as a hazardous waste. See chapter 7 for more information on hazardous waste.
3. If a spill has occurred (see definition above), alert the WMD (see contact information above).

### Best Management Practices for Spill Prevention and Preparedness

- ✓ Develop a basic spill prevention plan that addresses items below. Involve employees, since they are likely to be the most knowledgeable about how and why spills occur on the job.
- ✓ Maintain spill control, containment, and clean-up equipment in a designated area.
- ✓ Instruct employees in proper spill response procedures, including basic safety precautions like:
  - Minimize touching of spilled material and avoid walking in it;
  - Minimize inhalation of any resulting gases, vapors, or smoke;
  - Wash skin promptly if it comes in contact with spilled material.

- ✓ Use drip trays, funnels, or other means when transferring liquids.
- ✓ Use spring-loaded covers, valves, or other positive shut-offs to prevent the accidental discharge of hazardous materials to floor drains.
- ✓ Post a list of emergency numbers next to the phone.

### 6.3 Floor-Drain Discharges and Permitting

Wastewater discharges from floor drains and other sources are regulated by the Wastewater Management Division (WWMD) in Waterbury and the DEC regional offices. How wastewater discharges are regulated depends on where the wastewater goes (e.g., a septic system or dry well, a holding tank, a municipal wastewater treatment plant, or directly to the environment). It also depends on the volume of the discharge and whether the discharge includes sanitary wastewater (e.g., from bathrooms and sinks), process wastewater (e.g. from work areas), or both.

If you do not already know, you should determine where each of your floor drains discharges, and whether your sanitary and process wastewater are combined or separate. If you are unsure where a floor drain leads, contact your DEC regional office for assistance.

WWMD and DEC encourage businesses to connect their floor drains with holding tanks or municipal sewer connections, as these are the safest options for the environment, and because of potential liability issues if even small amounts of process waste released onsite contaminate drinking water supplies.

#### 6.3.1 On-Site Subsurface Discharges

The UIC Program prohibits the subsurface disposal of process wastewater from floor drains. If you have a floor drain that discharges on-site, whether subsurface or daylighted, it must be registered with the UIC Program.



If your subsurface discharge consists of purely sanitary waste, the discharge began prior to 1970, and no modifications to the system have occurred since then, a permit is not required. Otherwise, all facilities with existing discharges of wastewater to onsite subsurface systems like septic systems or drywells **MUST BE PERMITTED** with one of the DEC's regional offices.

The registration process consists of completing a UIC registration form. You may contact WWMD at 241-3822 to request a registration form. The application will be reviewed by the WWMD and a determination will be made as to whether the discharge is permissible, and whether a UIC permit is required. On-site floor drain discharges that are not registered with the UIC Program must be closed.

Floor drains discharging in areas where service work is not performed and where hazardous materials are not stored may be eligible to receive a permit. While exterior vehicle washing wastewater is not specifically disallowed by UIC regulations, it is unlikely that car wash facilities in general would qualify for a UIC permit due in part to the potential for contaminants typically generated by vehicle washwater.

Contact the WWMD at 241-3822 for more information on UIC and the permitting process.

### 6.3.2 Surface Discharges (“Day-Lighting”)

The practice of discharging waste liquids directly to the ground surface is known as day-lighting.



Day-lighting is **prohibited** if the discharges include waste from vehicle maintenance areas.

Snow melt from vehicles in areas where service work is **not performed** is permissible, provided that:

- the wastewater doesn't discharge directly to surface water (e.g., a stream, pond, or wetland), and
- no hazardous materials are stored or used in snowmelt areas, and
- a physical barrier, such as a wall or berm, is present between snowmelt areas and maintenance areas, and
- the discharge is infrequent and of low volume.

### 6.3.3 Discharges to a Holding Tank

If your floor drain discharges process waste to a holding tank, you must inform the WWMD regional office. An engineer from the regional office will review the specifics of the discharge and determine whether it is allowable.



You must obtain permission from the WWMD's regional office prior to installation of a new holding tank.

You may dispose of the collected wastewater at a municipal wastewater treatment facility or you may have it removed by a certified hazardous waste hauler. In either case, it is likely that you will need to test to see if the wastewater meets the definition of 'hazardous' in the Hazardous Waste Management Rules. See chapter 7 or contact the DEC for more information on hazardous waste management.

### 6.3.4 Discharges to Municipal Sewer Systems

**Sanitary waste:** the DEC requires a wastewater permit for any sanitary discharge from a business to a municipal wastewater treatment plant **UNLESS** the discharge began prior to 1970 **AND** the system has not been modified since that time.

**Process waste:** facilities that discharge process wastewater to a wastewater treatment plant must notify the WWMD, the operator of the municipal plant, and the person responsible for administering the local sewer ordinance. Depending on the volume and the make-up of the discharge, the shop might be required to obtain a “pretreatment” permit from the WWMD. If a pretreatment permit is not required, it is still necessary to notify the above-listed parties, and it is advisable to get permission for the discharge in writing. Municipalities often require that non-domestic wastewater pass through an oil/water separator before discharge to the treatment plant.



Hazardous materials, such as parts cleaning solvents, oils, or painting wastes are prohibited from being discharged to a municipal sewer system.

Any new connection or new use of an existing connection might require a wastewater permit.

For more information on municipal sewer connections and the regulations that apply to them, contact the WWMD regional office serving your area.

**For more information on floor drains and wastewater disposal, contact:**

Environmental Assistance Division  
Vermont Agency of Natural Resources  
103 South Main Street  
Waterbury, VT 05671-0411  
Tel: 241-3589  
Pollution Prevention & Compliance Assistance Hotline 800-974-9559