Shop Wastewater

Potential Environmental Impacts

Wastewater from garment care includes water from separators used in condensers, carbon adsorbers, cartridge strippers, stills, muck cookers, vacuums, washing machines, compressors, boiler blowdown and mop water from floor cleaning. Improperly disposed wastewater containing perchloroethylene (tetrachloroethylene or "perc") and other solvents from dry cleaners have been found in many drinking water wells over the years. Perc is denser than water and tends to sink quickly down through soils into the water table until it reaches an impervious layer such as clay or rock. It then dissolves very slowly into the ground water as the water flows past the spill. Perc persists long after the spill occurs, continuing to dissolve into the groundwater for many years. Perc is very dense and even in very small amounts it can migrate through the soil to contaminate nearby wells. The legal limit for perc in drinking water is 5 ug/l (parts per billion).

Legal Requirements

- Any discharge of dry cleaning process wastewater to a dry well, a septic system, or surface water (stream, river, lake, etc.) is prohibited.
- You must obtain an individual CT DEP wastewater permit before discharging any dry cleaning process wastewater to a sanitary sewer (a sewer line that connects to a sewage treatment plant). For more information, contact the CT DEP Water Bureau at (860) 424-3018.
- If your facility has floor drains, they:
 - ➤ are considered a wastewater discharge outlet even if they are not used regularly to discharge water. A permit from the CT DEP is required and you may be eligible for coverage under the *General Permit for Miscellaneous Discharges of Sewer* Compatible Wastewater;
 - > must not discharge to a septic system, a drywell, or a storm sewer;
 - > must connect to either a sanitary sewer or a holding tank. If you do not know where your floor drains lead, the building plans that you have or that are on file at the town hall may show locations of drain discharges; and
 - > must not be located where solvent spills or leaks can enter.
- Keep dry cleaning equipment and solvent transfer lines in good condition with no leaks. Inspect equipment weekly.
- Bermed storage area must be adequate to contain the total amount of solvent stored in the event of a spill or leak.
- Solvent contaminated water may be placed in a container, such as a 55-gallon drum. You must determine if it is a hazardous waste and manage it accordingly. (See Appendix A.) If it is determined to be a hazardous waste, it must be transported by a permitted hauler to a permitted disposal facility. For a list of permitted haulers, contact the CT DEP at (860) 424-4193.

- Non-contact cooling water from solvent distillation systems may be discharged to a sanitary sewer. To discharge non-contact cooling water to the sanitary sewer, you must:
 - 1. Receive permission from the municipality for your discharge, and
 - 2. Obtain the appropriate permit from the CT DEP for your discharge (most likely the *General Permit for the Discharge of Minor Non-Contact Cooling and Heat Pump Water*). You must not discharge any hazardous waste (e.g. perc, solvents) into the sewer. You must not discharge any substance that is prohibited by the municipality or your CT DEP permit. You must meet all conditions of the discharge permit.
- Facilities without sanitary sewers are encouraged to install a recirculating system for their non-contact cooling water, thus eliminating the water discharge. In some limited areas, it may be permitted to discharge non-contact cooling water to streams and storm drains if your shop is not connected to a sanitary sewer. If you wish to pursue this option, you must hire a professional engineer to prepare your permit application. For more information, contact the CT DEP Water Bureau at (860) 424-3018.
- You must maintain practices, procedures and the facility in such a manner as to minimize and control spills of toxic or hazardous substances (such as perc) from entering into the environment.

For copies of the general permits, registration forms or guidance documents explaining the requirements, visit the "Permits, Licenses and Registrations" section of the CT DEP website at www.dep.state.ct.us/pao/download.htm - WaterGP or call the CT DEP's Bureau of Water Management at (860) 424-3018.

Best Management Practices

- ★ We recommend sealing all floor drains unless required by a local building code. A permanently sealed floor drain should first have a plumber's plug inserted inside the drain. Concrete should then be poured on top of the plumber's plug.
- ★ Keep dry cleaning equipment and solvent transfer lines in good condition, with no leaks. Inspect equipment regularly.
- ★ Keep your shop floor dry and clean.
 - 1. Prevent spills from ever reaching the floor by using appropriate equipment, such as spigot pumps, funnel drum covers and floor pans.
 - 2. Never hose down your work area.
- ★ Consider sealing your shop floor with epoxy or other suitable sealant so spills won't be absorbed and clean-ups will be quicker. Concrete is porous and perc will penetrate into the soil below over time. Sealing your floor can reduce the liability for a clean-up of a contaminated shop floor and soil below.
- ★ Use double carbon wastewater treatment devices to clean up perc-contaminated wastewater and recycle wastewater to the process boiler.

- ★ If it becomes necessary to wash the floor, use only the quantity of water needed to produce the appropriate level of cleanliness. Flushing floor wastes outside constitutes an illegal discharge.
- **★** Post this notice by all sinks and drains "**DO NOT POUR ANY SOLVENTS OR OTHER** WASTES DOWN SINKS, TOILETS OR DRAINS".
- ★ Only use absorbents like speedi-dry or "kitty litter" when the spill cannot be cleaned with rags, dedicated mops, or squeegees. See the Lint, Rags and Filters Fact Sheet on how to properly manage spent absorbents.
- ★ Clean up spills immediately so that the spilled material does not get tracked outside the building.
- ★ If your wastewater is collected in a holding tank and hauled to a permitted facility, you can reduce your costs by segregating the regulated wastewater from "household" type wastewater. Only wastewater from bathrooms and cafeterias can be discharged to a septic system.

Pollution Prevention Checklist

		Did You Know?			
	☐ YES	□ NO	□ N/A		
✓	Do you inspect dry cleaning equipment and solvent transfer lines at least weekly?				



As little as a teaspoon of "perc" will contaminate enough water to fill two Olympic size swimming pools.

2004 Garment Care Fact Sheets

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