

Drycleaning and Laundry Plants

Industry Overview

While not all dry cleaning and laundry facilities produce hazardous waste, those facilities using hazardous solvents might be subject to Resource Conservation and Recovery Act (RCRA) requirements covering the generation, transportation, and management of hazardous waste.

The establishments covered under *drycleaning and laundry plants* include:

- Retail drycleaning stores
- Industrial and linen supply plants with drycleaning operations
- Leather and fur cleaning plants
- Self-service laundromats with drycleaning equipment
- Other establishments with drycleaning operations.

Hazardous Wastes from Drycleaning and Laundry Plants

Potential hazardous wastes generated by drycleaning and laundry plants are primarily solvents. These solvents include:

Perchloroethylene, otherwise known as perc, PCE, or tetrachloroethylene

Valclene, also known as fluorocarbon 113 or trichlorotrifluoroethane

Petroleum solvents, such as Stoddard, quick-dry, low-odor, and other solvents.

Perchloroethylene plants potentially produce three types of hazardous wastes:

Still residues from solvent distillation (the entire weight)

Spent filter cartridges (total weight of the cartridge and remaining solvent after draining)

Cooked powder residue (the total weight of drained powder residues from diatomaceous or other powder filter systems after heating to remove excess solvent).

Valclene plants potentially produce two types of hazardous wastes:

Still residues from solvent distillation (the entire weight)

Spent filter cartridges (total weight of the cartridge and remaining solvent after draining).

Petroleum solvent plants potentially produce only one type of hazardous waste:

Still residues from solvent distillation (the entire weight).

To determine whether your plant qualifies as a regulated generator and to complete the Uniform Hazardous Waste Manifest, you EPA/530-SW-90-027b

must determine the weight of the hazardous waste your plant generates. Table 1 lists common types and average quantities of hazardous waste produced per 1,000 pounds of clothes cleaned.

If you generate 100 kilograms (220 pounds or about half of a 55-gallon drum) or more of hazardous waste per month, you must fill out a Uniform Hazardous Waste Manifest when you ship hazardous waste off your property. The Manifest requires the proper Department of Transportation (DOT) description for each waste. DOT description information is provided in Table 2 to aid in preparing the Manifest. Table 1 and Table 2 are not comprehensive lists. If you suspect you generate other hazardous wastes, contact your state hazardous waste agency or Regional EPA office for more information.

Waste Minimization

An effective waste minimization program can reduce the costs, liabilities, and regulatory burdens of hazardous waste management, while potentially enhancing efficiency, product quality, and community relations. Waste minimization techniques that can help you reduce the amount of hazardous waste that you generate include:

- Production planning and sequencing
- Process/equipment adjustment or modification
- Raw material substitution
- Loss prevention and housekeeping
- Waste segregation and separation
- Recycling.

Training and supervision of employees implementing waste minimization techniques is an important part of your successful program. Call the RCRA/Superfund Hotline toll-free at 800-424-9346 (or TDD 800-553-7672 for the hearing-impaired) for waste minimization information and publications.

Table 1
Typical Quantities of Hazardous Waste From Dry Cleaning
(Pounds of waste per 1,000 pounds of clothes cleaned)

Waste Type	Cleaning Method		
	PERC	Valclene	Petroleum Solvents
Average Quantity of Hazardous Waste (pounds)			
Still Residues	25	10	20
Spent Cartridge Filters			
Standard (carbon core)	20	15	*
Adsorptive (split)	30	20	*
Cooked Powder Residue	40	NA	NA
Drained Filter Muck	NA	NA	*

* Well-drained filter cartridges or drained filter muck are solids and are not likely to meet the criteria for classification as ignitable solids; therefore, they are usually not hazardous wastes. Be sure, however, that these wastes do not fail the Toxicity Characteristic Leaching Procedure; if they do, they are hazardous wastes.

Table 2
Drycleaning and Laundry Plants Waste Descriptions¹

Waste Type	Designations/Trade Names	DOT Shipping Name	Hazard Class	UN/NA ID Number
Perc		Waste Perchloroethylene or Waste Tetrachloroethylene	ORM-A	UN1897
Valclene		Hazardous Waste, NOS ²	ORM-E	UN9189
Petroleum Solvents		Waste Petroleum Distillate	Combustible Liquid ³	UN1268
		Waste Petroleum Naphtha	Combustible Liquid	UN1255
Hazardous Waste, NOS		Hazardous Waste, Liquid or Solid, NOS	ORM-E	NA9189

¹ In certain situations, other DOT descriptions may be applicable to the wastes listed.

² NOS - not otherwise specified.

³ If the flash point of the solvent or residue as disposed of is less than 100°F, the hazard class is "flammable liquid." Although the flash point of petroleum drycleaning solvents is above 100°F, the presence of contaminants (such as printing inks) could lower the overall flash point to below 100°F.

For further information call the RCRA/Superfund Hotline 1-800-424-9346