

## Viability of Wet Cleaning:

Wet cleaning technology has improved dramatically over the past 10 years, such that facilities are now able to clean virtually everything with wet cleaning systems.

- Wet cleaning machines simulate handwashing—minimizing agitation yet effectively cleaning delicate garments.
- Computer programmed detergent injection systems allow loads to be washed with precision.
- Biodegradable detergents are used that are specially formulated to maximize cleaning power while preserving color and size.
- Dryers are equipped with moisture sensors to ensure clothes are not over dried.
- Special tensioning equipment is used at the end of the process to provide appropriate final finishing of jackets, pants, and tailored items.



## TURI Sponsors a Wet Cleaning Demonstration Day

In October of 2007, TURI hosted dry cleaners from across Massachusetts for a demonstration of wet cleaning washing, drying, and tensioning equipment.



The objective was to allow the cleaners to see first hand how effective wet cleaning is. Cleaners who have converted to wet cleaning came from California to operate the equipment and answer questions. Representatives were also on hand from the Northeast Fabricare Association, Korean Dry Cleaners Association, National Grid (energy supplier), and equipment suppliers.

TURI is also providing a matching grant to assist a Massachusetts facility in converting to wet cleaning.

You can find more information about this project at: [www.turi.org/community](http://www.turi.org/community)

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**“On the whole, wet cleaning has produced cleaner, fresher looking clothes for my customers.”**

— Myeong-Ho Lowe, Owner of Utopia Cleaners, Arlington, MA

**“Once I learned that wet cleaning was an option, I requested it from my local dry cleaner and have been perfectly satisfied. Plus, I feel good that I am helping to protect the environment.”**

— Ruth Schreiber, Customer, Arlington, MA

## A Better Way to Care for Your Clothes



New and Improved Wet Cleaning Technology Is a Proven Safer Alternative to Solvent Cleaners



## DID YOU KNOW?

**Perchloroethylene (commonly referred to as perc) is dangerous to your health and the environment**

### *What is perc?*

Perc is a synthetic chlorinated hydrocarbon. It is primarily used as a solvent in dry cleaning and in industrial applications.<sup>1</sup>

### *How can it affect you?*

Short term exposure to perc can cause symptoms such as skin, eye, and respiratory irritation, headache, and nausea; very high exposure can be fatal. Long term exposure to perc may cause liver, kidney or central nervous system damage. Perc may also affect the developing fetus. The International Agency for Research on Cancer lists perc as a probable human carcinogen (Group 2A).<sup>2</sup>

### *How prevalent is the use of perc?*

Since the 1960s, the dry cleaning industry has used perc as its primary cleaning solvent. There are over 550 dry cleaning facilities in Massachusetts that report their perc use as part of Mass-DEP's Environmental Results Program. These facilities use over 970,000 pounds of perc, resulting in the generation of 600,000 pounds of hazardous waste per year.<sup>3</sup>

### *What can you do?*

Many dry cleaners in Massachusetts use a combination of processes—a solvent (such as perc), a hydrocarbon, and/or wet cleaning. Unless you specifically request wet cleaning, they may use one of the other processes to clean your clothes.

There are a number of alternatives to perc for garment cleaning, but many of them have environmental, health and safety concerns, or have not been thoroughly studied. Of the available alternatives, wet cleaning has the fewest hazards associated with it.



**Ask Questions! You should know what chemicals are being used on your clothing.**

### *3 Questions to ask your dry cleaner:*

- 1) **What process or chemicals do you use to clean clothes?**
- 2) **What do you mean by “green,” “organic” or “environmentally friendly?”**
- 3) **Is wet cleaning available at this store?**

*Wet cleaning is a feasible alternative to cleaning with hydrocarbons or solvents.*

There may already be a retailer in your neighborhood that uses wet cleaning! Reward them with your business.

## DID YOU KNOW?

**Recent legislation and restrictions are limiting the use of perc...**

- On July 27, 2006, the federal Environmental Protection Agency (EPA) published a rule that new perc dry cleaning facilities may not be located in residential buildings and all perc will be eliminated in residential buildings by 2020.
- Increasingly, landlords are requiring dry cleaners that occupy space in their buildings to not use perc.



This information is provided by the Massachusetts Toxics Use Reduction Institute (TURI) at the University of Massachusetts Lowell. Established by the State Toxics Use Reduction Act of 1989, TURI provides research, training, technical support, laboratory services and grant programs to reduce the use of toxic chemicals while enhancing the economic competitiveness of local businesses. TURI does not endorse or recommend any product or company.

<sup>1,2</sup> Toxics Use Reduction Institute, Five Chemicals Alternatives Assessment Study, June 2006.

<sup>3,4</sup> Toxics Use Reduction Institute, Massachusetts Chemical Fact Sheet, Perchloroethylene, 2007. [www.turi.org/library/turi\\_publications/chemical\\_fact\\_sheets](http://www.turi.org/library/turi_publications/chemical_fact_sheets)