Dry Cleaner Environmental Results Program

What it is / What We’ve Learned about Dry Cleaners
December 2, 2014

What Does ERP Involve?

• Annual Compliance Certification
• Multi Media: Air MACT, Hazardous Waste, Industrial Wastewater
• Covers required control equipment, proper operational and recordkeeping procedures, reporting
• Return to Compliance Plans
• Comprehensive Compliance Workbooks
• Annual $500 fee
What is the Universe Like

- **How Many:**
  - Currently 352 vs 662 in 1998

- **Perchloroethylene use / total pollution:**
  - Currently 55 gal/dry cleaner vs 152 gal in 1998

- **Hazardous Waste Generation:**
  - Currently 493 lbs/dry cleaner vs 1213 lbs in 1998

- **Random Inspections indicate that the certifications result in better compliance**

Expanded in 2013 to Promote Perc Reduction

**Changed Certification to:**

- Promote efficient perc use and toxics use reduction
- Obtain data on use of alternatives in conjunction with perc
- Obtain data on dry cleaners’ plans for replacing aging equipment: schedule, options they would consider, factors influencing their decision
- Promote the use of a simplified alternative assessments tool developed by TURI and MassDEP
Additional Changes
Added extensive information on perc alternatives to the workbook:

- Descriptions
- Comparative Data
- Case Studies
- Simplified Assessment Tool that compares environmental impacts, cost, effectiveness, health safety, water use, energy requirements of each alternative to that of perc

So What Have We Learned?
Increasing Adoption of Non Perc Alternatives:

# Perc & Alternative Machine Installations by Year
New Perc Machines as % of All New Machines

What have they Switched to?

- 110 have switched entirely out of perc since 2003 – mostly to hydrocarbon

- 65 of the 350 still using perc also use an alternative
  - 50 use wet cleaning
  - 15 use hydrocarbons
What Did Dry Cleaners Say
By 2014:
• About half calculate solvent mileage
• Replacement of equipment imminent:
  – 29% in 0-2 years
  – 45% in 2-5 years
  – 19% in 5-10 year
  – 7% in >10 years
• About half did the alternatives assessment

What are Dry Cleaners Considering?
• About 2/3rds have seen alternative in operation
• About half think an alternative would work
• Ranking of Alternatives:
  – 40% Hydrocarbon and Wet Cleaning
  – 12% Acetal (Solvon K) and Propylene Glycol (Rynex / Gen-X)
  – 5% Siloxane (Green Earth) 1% n-Propyl Bromine
What Factors Influence their Decisions?

- Cost: cited by 49%
- Environment: cited by 47%
- Safety: cited by 44%
- Health: cited by 43%
- Performance: cited by 42%
- Regulations: cited by 32%
- Energy: cited by 26%
- Facility Location: cited by 9%