Drycleaning Industry Trends

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Discussion Topics

- Review of Perc Drycleaning Equipment Technologies
- Worker Exposure Data
  - Skory Consulting, Inc data
- State Programs
- Equipment Survey Data
- Impact on Perc Consumption
Perc Emissions and Demand Based on Equipment Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Fugitive</th>
<th>Waste</th>
<th>Total Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Generation</td>
<td>68</td>
<td>14</td>
<td>82</td>
</tr>
<tr>
<td>2nd Generation</td>
<td>20</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>3rd Generation</td>
<td>5</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>4th/5th Generation</td>
<td>-4</td>
<td>6*</td>
<td>10</td>
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</tbody>
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* Reduction in waste due to standard offering of disc filters vs. cartridge filters

NIOSH Perc Forum, Cincinnati, OH

Average Perc Exposure by Year

NIOSH Perc Forum, Cincinnati, OH
1997-2002 Drycleaning Vapor Monitoring Results:
Transfer

1997-2002 Drycleaning Vapor Monitoring Results:
2nd Generation + Adsorber
State Programs

- Clean up legislation passed in several states:
  - AL, AZ*, CT*, FL, IL, KS, MN, MO, NC, OR, SC, TN, WI
- Key elements:
  - Programs are generally similar to gasoline station clean up programs
  - Funding structure: solvent fees, licensing fees, environmental surcharge on all garments cleaned
  - Regulatory implementation includes pollution prevention practices beyond current federal requirements
  - Direct and indirect “incentive” to utilize newer generation equipment
- New York (~'99) and California (~'94) state Air Regulations require “newer” equipment technologies

All result in positive added benefit of reducing worker exposure
Conclusions

Worker exposure to perc in the drycleaning industry is being significantly reduced

- Newer, more efficient, perc equipment technology reduces potential for worker exposure by reducing emissions
- Industry data shows drycleaners are converting to more efficient equipment
- State programs for drycleaning site remediation are an additional driver to accelerate purchase of efficient equipment
- Impact is clearly demonstrated by reduction in both perc consumption by the industry and in vapor monitor exposure measurements