GREEN WRENCH MAKES CENTS
AGENDA

1. Intro to GreenWrench
2. Program Elements
3. Source Reduction
4. Get Involved
WHY WAS GREENWRENCH CREATED?

1. Critical source of pollution: Land, air and water

2. Unified Guidance
   a) Natural Resources (stormwater)
   b) Energy
   c) Environmental Services (air and toxics)
   d) Urban Sustainability

3. Funding from the EPA
Help businesses become compliant with environmental regulations, protect the environment and improve their bottom line.

1. Onsite Technical Assistance
2. Workshops
3. Toolbox Newsletter
4. Certification Program
Target Audience

- Auto body and repair shops
- Businesses, universities, government, and others
- Small, medium, and large facilities
Benefits

- Save money
- Receive onsite consultations and training
- Protect yourself from harmful substances
- Fits into your schedule
- Attract customers

Languages
- English
- Spanish (Español)
- Amharic (አማርኛ)

Free to all registered participants
Receive free technical assistance with confidential in-person visits by a consultant team.
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1. Checklist- To determine estimated baseline of material and waste management.

2. Develop a customized Pollution Prevention (P2) Plan: Walk through suggestions for areas that could help shop in reducing pollutants/saving money.

3. Follow-up to how plan is going
ADDITIONAL TECHNICAL ASSISTANCE

- Go through Automotive Pollution Prevention Guidebook
- Any additional compliance help and troubleshooting
Learn and ask questions from government inspectors about how to comply with local and federal regulations.
Find tips and tricks for reducing pollution and case studies in the Toolbox Newsletter
GreenWrench Certification shows you are in compliance with environmental regulations and have taken additional steps to reduce land, air and water pollution.

Attract environmentally-conscious customers:

- List of certified shops on DOEE website
- Window decal
MEASURING SUCCESS:

1. Use/disposal of toxic substances (pounds)
2. Air pollution (MTCO2e)
3. Water used (Gallons)
4. Money saved (Dollars)
GreenWrench collects information on these measures to help assess how effective the program is at reducing pollution.

- Checklists and certification worksheet
- Data is kept anonymous when shared with DOEE
SOURCE REDUCTION
WHAT IS SOURCE REDUCTION?

• Any practice that reduces, eliminates, or prevents pollution at its source
WHAT CHANGES CAN YOU MAKE?

• Take a look at ways to reduce pollution
  o Alternative products
  o Alternative methods
  o Potential benefits

• Case studies
# Alternatives to Typical Parts Cleaning & Lubrication Products

<table>
<thead>
<tr>
<th>Application</th>
<th>Typical Product</th>
<th>Alternative Product</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degreaser</td>
<td>• Petroleum-based solvents • Chlorinated solvents</td>
<td>• Water-based cleaners or EPA Safer Choice products (pick “degreaser” at EPA Safer Choice Website <a href="https://www.epa.gov/saferchoice/products">https://www.epa.gov/saferchoice/products</a>) • Steam Cleaner • Parts washer with cleaning fluid that is non-solvent or water based</td>
<td>• Non-toxic alternative/ safer for employees • Non-hazardous waste alternative • Cheaper to dispose of</td>
</tr>
<tr>
<td>All-purpose lubrication or corrosion inhibitor</td>
<td>• Petroleum-based all-purpose cleaner/corrosion inhibitor • Product with aliphatic hydrocarbons</td>
<td>• Plant-oil based • Free of Aliphatic hydrocarbons • Biodegradable • Reusable, pressurized aerosol cans • Non-Aerosol and low-VOC products</td>
<td>• Non-toxic alternative/ safer for employees • Non-Hazardous waste alternative • Cheaper to dispose of</td>
</tr>
</tbody>
</table>
CASE STUDY- MIKE’S AUTO BODY

Saved $1,525 per year by switching to eco-friendly break cleaning and degreasing products.

• Biodegradable
• VOC compliant
• Free of harmful chemicals like surfactants, hydrofluoric acid, ammonium bifluoride, phosphate, and chlorine

Toxics Use Reduction Institute, Mike's Auto Body was recognized as a Champion of Toxics Use Reduction
Antifreeze can be easily and efficiently recycled

- Used antifreeze can be hazardous waste
- Recycled antifreeze is roughly half the cost of new product
# Alternatives to Tire Balancing, Patching & Replacement

<table>
<thead>
<tr>
<th>Application</th>
<th>Typical Product</th>
<th>Alternative Product</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire balancing</td>
<td>• Lead wheel weights</td>
<td>• Aluminum, steel, zinc, and other non-lead wheel weights</td>
<td>• Hazardous waste source reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Reduce risk of lead poisoning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Long-term cost savings</td>
</tr>
<tr>
<td>Tire Patching</td>
<td>• Solvent-based adhesives</td>
<td>• Water-based or brands that use nontoxic solvents</td>
<td>• Lower toxicity</td>
</tr>
<tr>
<td></td>
<td>• Cyanoacrylate (CA) adhesives</td>
<td></td>
<td>• Improved respiratory health</td>
</tr>
<tr>
<td></td>
<td>• Spray-adhesives</td>
<td></td>
<td>• Cleaner air</td>
</tr>
</tbody>
</table>
## Alternatives to Reduce Energy Use

<table>
<thead>
<tr>
<th>Application</th>
<th>Typical Product</th>
<th>Alternative Product</th>
<th>Benefits of Alternate Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>• Incandescent bulbs</td>
<td>• LED bulbs</td>
<td>• Reduced energy and bulb replacement costs</td>
</tr>
<tr>
<td></td>
<td>• Fluorescent bulbs</td>
<td></td>
<td>• LEDs are not universal waste</td>
</tr>
<tr>
<td>Vacuuming</td>
<td>• Gas/diesel shop vacuum</td>
<td>• Energy efficient shop vacuum</td>
<td>• Reduced energy costs</td>
</tr>
<tr>
<td>Air compressors</td>
<td>• Conventional air compressor equipment</td>
<td>• Energy-efficient air compressor equipment</td>
<td></td>
</tr>
<tr>
<td>Heating and air conditioning</td>
<td>• Typical HVAC system</td>
<td>• Energy efficient HVAC system</td>
<td></td>
</tr>
<tr>
<td>Vending machines</td>
<td>• In use 24 hours</td>
<td>• Plug-loaded occupancy sensor</td>
<td></td>
</tr>
<tr>
<td>Bay heating</td>
<td>• Used oil / used solvent heater</td>
<td>• Energy efficient HVAC system</td>
<td>• Legal to use in the District (used oil heaters are illegal)</td>
</tr>
</tbody>
</table>
District of Columbia Sustainable Energy Utility (DCSEU) helps businesses save energy and money through energy efficiency and renewable energy programs.

Rebates:

- $60 for ambient light fixtures and LED tube lighting
- $2.75 per kBtu/hr for condensing furnaces (<225 kBtu/hr, AFUE>95%)
- Custom rebates for ventilation and other equipment
AYT Auto Services in NE invested in rooftop solar panels in February 2019.

Goals: reduce operational costs & shop to be environmentally friendly.

Upfront costs were financed through DOEE.

Contact DOEE’s Solar for All hotline at (202) 299-5271 or solarforall@dc.gov.
# Alternative to Reduce Solid Waste

<table>
<thead>
<tr>
<th>Application</th>
<th>Typical Product</th>
<th>Alternative Product or Practice</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Packaging     | • Individually wrapped products  
                 • Cardboard boxes                                                               | • Buy in bulk to reduce packaging  
                 • Reusable containers                                                              | • Minimize waste  
                 • Reduce costs                                                                        |
| Office supplies | • Plastic binders  
                 • Disposable pens  
                 • Paper made from virgin product  
                 • Standard cleaning products                                                   | • Cardboard or metal binders  
                 • Refillable pens  
                 • Electronic bills and receipts  
                 • Paper products made with recycled content  
                 • Print double-sided  
                 • Non-toxic cleaning products. Find a list at [www.epa.gov/SaferChoice/products](http://www.epa.gov/SaferChoice/products) | • Reduce solid waste and the amount of trash that goes to landfills |
| Food and drink | • Single-use cups  
                 • Disposable water bottles                                                      | • Water cooler/pitcher  
                 • Reusable cups  
                 • Buy in bulk  
                 • Compost food and napkins                                                       | • Reduce material to the landfill  
                 • Reduces costs                                                                      |
| Restrooms     | • Paper towels and toilet paper made from virgin paper  
                 • Regular faucet  
                 • Standard cleaning products and hand soaps                                    | • Products made with recycled content  
                 • Hand dryer  
                 • Motion-activated faucet  
                 • Non-toxic and sustainable cleaners and hand soaps. Find a list at [www.epa.gov/SaferChoice/products](http://www.epa.gov/SaferChoice/products) | • Reduce solid waste and the amount of trash that goes to landfills  
                 • Reduce water use                                                                  |
GET INVOLVED

Sign up online or by calling 202-645-4231.

1. Technical Assistance
2. Workshops
3. Newsletter
4. Certification

Sign Up For GreenWrench

*Required
Name *
Your answer

Contact Information *
Enter the phone number, email address, and/or address where you can be reached.
Your answer

doee.dc.gov/service/greenwrench
QUESTIONS?

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