SAFER PRODUCTS IN THE NORTH MINNEAPOLIS COMMUNITY

Challenge

The job is to repair, and tune cars and trucks for the citizens of the North Minneapolis. Keeping these vehicles running requires the use of an engine degreaser or brake cleaner to remove grease and grime so the mechanics can identify issues and make repairs. Unfortunately, most brake cleaners contain chemicals that are harmful to human health and the environment, and identifying economical safer products within the local supply chain is challenging.

Approach

These sites tested various blends of acetone, heptane, hydrocarbons as replacements for more hazardous blends containing xylene, toluene, PERC, TCE and methanol. The safer products were sourced from local Napa and O’Reilly Auto Parts stores. After identifying a working product, the auto shops were given a case of the product to continue testing it to ensure that it met cleaning expectations.

Results

Replaced hazardous automotive degreasers with safer alternatives.

16 Sites Engaged - 4 sites Implemented

520 lb/yr VOC Reduction

440 lb/yr HAP Reduction

Link to more information on safer products that work.
Spotlight on: Monte’s Auto Repair

Company

Monte opened his shop in North Minneapolis in 2012 and strives to keep repair costs low. Building relationships and trust with his customers is very important part of providing good customer service without the corporate feel. Their friendly staff do all types of auto repair and enjoy discussing the process with their customers.

Motivation

Invested in their local neighborhood, Monte’s was very eager to learn about the impacts of their O’Reilly Non-Chlorinated Brake Cleaner #72408. Volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) are commonly found in brake cleaner. VOCs evaporate into the air creating ground level ozone, a contributor to air pollution. HAPs also evaporate and have negative impacts on human health when inhaled or absorbed through the skin. With an interest in the community and their employees in mind, Monte’s wanted to learn more about safer brake cleaners.

Process and Results

MnTAP and Monte’s worked with their current supplier, O’Reilly’s Auto parts to find a safer alternative. While O’Reilly’s doesn’t currently carry the Ultra Low VOC Brake Cleaner #46580, they can order it from the local warehouse in Brooklyn Center and have it available for next day pick up. Monte’s trialed a sample and found that it performed similarly to the current product. Making this switch reduced their VOC emissions by 86% and eliminated HAP emissions with no cost increase.

<table>
<thead>
<tr>
<th>O’Reilly Brake Cleaner Comparison</th>
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<tbody>
<tr>
<td>Product</td>
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<tr>
<td>Non-Chlorinated Brake Cleaner #72408</td>
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<tr>
<td>Ultra Low VOC Brake Cleaner #46580</td>
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<tr>
<td>VOC Content</td>
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<tr>
<td>70%</td>
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<td>10%</td>
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More information on safer products or on how to calculate the VOCs and HAPs in your products can be found on our website: http://www.mntap.umn.edu/industries/air/degreasing.html

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