

# Distad's BP

## GreenWrench Technical Assistance Case Study

### Overview

The GreenWrench Technical Assistance Program (GreenWrench) provides free pollution prevention guidance and training to mechanics and automotive repair businesses in the District of Columbia (District). This voluntary program is offered free of charge by the District Government's Department of Energy and Environment (DOEE) thanks to grant funding from the U.S. Environmental Protection Agency. GreenWrench is designed to help businesses become compliant with local and federal environmental regulations, protect the environment, and improve their bottom line by encouraging pollution prevention.

The GreenWrench program encourages practices that reduce, eliminate, or prevent pollution before treatment or disposal (also known as source reduction). These case studies highlight pollution prevention actions that participating facilities have implemented in order to demonstrate the impact of the actions on the environment and their cost-effectiveness. It is hoped that by highlighting these success stories, others are inspired to take similar actions that are both good for the environment and good for businesses.

DOEE, along with their contractor DesignGreen, LLC, worked with Distad's BP to assess their energy consumption, hazardous waste accumulation, and overall contribution to pollution. The automotive repair shop was given a pollution prevention plan (P2 Plan) with recommendations as to how they can comply with local and federal regulations, reduce their carbon footprint, and save money. While implementation of the P2 Plan was optional, Distad's BP decided to implement many recommendations provided by DOEE. On average, the three pollution prevention plans recommend actions that may reduce carbon dioxide emissions by 0.67 metric tons, reduce water consumption by 131 gallons, and reduce volatile organic compounds by 300 pounds per month.

### GreenWrench Impact

The goal of GreenWrench is to encourage auto shops to be more mindful of their environmental impact and to then recognize the shops that took strides in implementing the actions highlighted in their P2 Plan through the GreenWrench Certification. GreenWrench provides an opportunity to protect both human and environmental health, ensure compliance with DC Government regulations, and try environmentally friendly products free of charge. Implementation of their personalized P2 Plan helps the shop to become more environmentally friendly by reducing their contribution to air and water pollution while increasing savings on their water and electric bill.



# GREEN WRENCH

TECHNICAL ASSISTANCE

DEPARTMENT OF ENERGY & ENVIRONMENT

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WE ARE  
WASHINGTON  
DC GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
MURIEL BOWSER, MAYOR

# Distad's BP

**Location:** 823 Pennsylvania Ave. SE, Washington, DC 20003

**Type of Business:** Auto Repair Shop

**Number of Bays:** 2

## About The Shop

Distad's BP is located on Capitol Hill and services the nearby community. The activities performed at the shop include body repair, electrical, fuel and ignition systems, tire replacement and repair, and AC services. This location on Pennsylvania Ave has been owned by John Distad since 1974. It initially opened over 20 years prior by his father in 1951. John has strong connections to the community and has worked with families for up to three generations. With 70 years of being in business, customer service is a main priority for John Distad and Distad's BP. He noted that he consistently receives top ratings from Consumer's Checkbook.

## Background

Distad chose to participate in GreenWrench to ensure that the shop is following city regulations. Before Distad's BP became a participant in the program, the auto repair shop already followed the District's environmental compliance standards. The shop is registered as a conditionally exempt small quantity generator, meaning less than 220 pounds of hazardous waste is produced per month. Distad also

maintains a hazardous material inventory, keeps Safety Data Sheets, and receipts from licensed waste and recycling haulers. Regarding materials, Distad's BP uses water-based cleaning fluid, recycled antifreeze (both extracted on site and purchased), and has LED lights installed. Not only do the LED lights help the environment, but they also lower the shop's electricity bill by 200-300 dollars.

The areas that could be improved as identified by GreenWrench include the replacement of hazardous and toxic material with more environmentally friendly alternatives. Some suggestions given to Distad's were to use zinc and steel wheel weights instead of the standard lead wheel weights, use degreasers without Volatile Organic Compounds (VOCs), and use nontoxic lubricants. Other recommendations were to use more energy efficient and water efficient products and install an automatic setback thermostat (also called smart or programmable thermostat). These actions were all highlighted in the personalized Pollution Prevention (P2) Plan created by GreenWrench for Distad's BP.

## Results

### Current Actions and Material Usage

Since the delivery of the P2 Plan, Distad's BP started using

**Table 1. Activities where reductions have been or can be achieved during GreenWrench Participation.**

**Asterisk (\*) denotes recommended actions not yet implemented**

Activity	Before (per month)	After (per month)	MTCO <sub>2</sub> e Reduced (per month)	Gallons Water Reduced (per month)
Used Oil (Virgin)*	40 gallons	0 gallons	-0.4084	-
Re-refined oil*	0 gallons	40 gallons	0.4084	-
Disposable rags	95 rags	60 rags	-	-
Unregulated waste (trash)	3 bags	2 bags	0.006	-
Recycling	18lb.	25lb.	0.0090	-
Lead Wheel Weights, Recycling*	5 lbs.	0 lbs.	0.0004	-
Non-Lead Wheel Weights*	0 lbs.	5 lbs.	-	-
Fluorescent Lightbulbs	1	0	0.0299	-
Automatic setback thermostats*	0	1	0.167	-
Low Flow Toilets*	0	1	0.443	97.344
<b>Total Reductions</b>	<b>-</b>	<b>-</b>	<b>0.655</b>	<b>97.344</b>

degreasers with no VOCs and non-toxic lubricants. The shop also takes steps to reduce waste, utilizes No Engine Idling Signs and puts stickers near light switches to remind people to turn the lights off when not in use. Additionally, the storm drains near the auto repair shop are marked to remind employees that any discharge into the inlets leads to a local body of water like the Anacostia River.

## Pollution Prevention

Before Distad's BP participation with GreenWrench, an estimated 1,491 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) were produced per month. Based on the actions that have been or will be completed, the amount will decrease by 0.665 MTCO<sub>2</sub>e per month (Table 1). That translates to an 56% reduction which can be attributed to the installation of a low flow toilet in the shop's restroom. For comparison, the reduction would offset 724 pounds of coal burned or 1,646 miles (about half the width of the United States) traveled in a passenger vehicle (EPA GHG Calculator, 2021).

Furthermore, Distad's BP previously used Spray Nine degreaser as the shop's main choice though it is considered a hazardous product by OSHA (Occupational Safety and Health Administration). Based on the shop's average usage of degreaser, up to 16 pounds of hazardous waste could be reduced with a transition to a product on the EPA's Safer Choice List. Some options include Simple Green Cleaner and Degreaser or Bio-Parts Cleaner/Degreaser which are not hazardous according to OSHA standards.

## Future Goals and Savings

There are a variety of actions that the shop could continue to implement that will reduce pollution. For example, Distad's BP could install low flow toilets and motion activated faucets which both save water or use an automatic setback thermostat to reduce energy usage. Both actions result in reductions on monthly bills while simultaneously benefiting the environment.

Switching to a low flow toilet shop's restroom could result in savings of about \$140 dollars a year (EPA, n.d.). As for LED light bulbs, savings are shown through reduced electric costs per year, and the ten-year cost compared to fluorescent and halogen bulbs. If 20 LED light bulbs are installed, savings could amount to \$1000 over a decade (CFA, 2017). Switching from a traditional thermostat to a smart thermostat is also cost effective as it saves about \$15 a month.

## Conclusion

Distad's BP is a great model for other shops in the District who are interested in participating in the GreenWrench Program and becoming GreenWrench Certified. Though there are still ways that the shop could improve to increase sustainability, the owner, John, demonstrates a willingness to learn about the variety of options they have to meet these goals. Many of the suggestions by GreenWrench to participants are low cost and save money long term. Other auto repair facilities in the District are also encouraged to engage with the program to protect the environment and lower operating costs.

The GreenWrench program will continue to work with automotive businesses and provide guidance on actions they can take to protect the environment.

## Works Cited

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