

# Biodiesel Facts

*SHA will push the white stuff off the roads using a little green stuff. SHA's has been using a five percent mixture of biodiesel fuel, depending upon market availability. When compared to petroleum diesel fuel, the use of biodiesel fuel yields significant environmental benefits, such as reduction of particulate matter, unburned hydrocarbons, carbon monoxide and carbon dioxide.*

**What is biodiesel fuel?** Biodiesel fuel is a clean burning alternative fuel that is produced from renewable resources, such as soybeans. Biodiesel fuel can be blended with standard diesel fuel in different percentages ranging from five percent to 100 percent.

**When did the State Highway Administration (SHA) begin using biodiesel fuel?** SHA began blending biodiesel fuel with standard diesel fuel in October 2005.

**Does converting to a biodiesel fuel blend require retrofitting existing engines with expensive upgrades?** Biodiesel fuel blends can be used in diesel engines with little or no modifications. SHA uses a blend of five percent Soybean Oil. The higher concentration of biodiesel fuels, above 20 percent, may require some minor engine retrofitting, including fuel system heaters.

**How does biodiesel fuel benefit the environment?** Biodiesel fuel is derived from natural, renewable resources. Studies indicate that biodiesel results in lower vehicle emissions compared to standard petroleum diesel fuel. Biodiesel fuel is less toxic than ordinary table salt and is biodegradable. In fact, biodiesel degrades as fast as sugar.

**Does biodiesel fuel work in extremely cold weather?** Biodiesel fuel blends work in virtually all weather however; a five percent biodiesel is SHA's preferred blend and is effective in temperatures as low as -30 degrees.

**Why use biodiesel fuel?** Biodiesel fuel is a renewable resource of energy that is derived from commodities such as soybeans, which are plentiful and renewable.

**Does biodiesel fuel cost the same as conventional diesel fuel?** Although biodiesel fuel is produced from plentiful resources such as soybeans, the technology is still in its infancy when compared to 100 percent petroleum products; therefore biodiesel costs SHA approximately three cents per gallon more to purchase.

**What is SHA's next step in "greening" the fuel?** SHA will continue to use a five percent biodiesel fuel blend.. SHA continues to research the possibility of moving to higher percentage blends in the future.

*Sources: The National Biodiesel Board and the Maryland Department of Transportation's State Highway Administration.*