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BIODIESEL BENEFITS: ENVIRONMENTAL

POLLUTION REDUCTION FOR IMPROVED HEALTH:

Biodiesel is a non-toxic alternative fuel produced from domestic, renewable resources such as vegetable oils, animal fats and recycled greases. It acts like petroleum diesel fuel, but produces significantly less air pollution.

Biodiesel lowers pollutant risks to our residents and costs to clean the air, ground and waterways of diesel pollutants and improperly disposed waste. Biodiesel lowers harmful carbon monoxide, carbon dioxide, sulfur dioxide and hydrocarbon levels by 50 to 100%. It thus reduces soot, smog, and cancer-causing compounds.

The below chart is not intended to represent a detailed scientific analysis. The information has been compiled from the Environmental Protection Agency, Department of Energy, the National Biodiesel Board and emissions control equipment manufacturers. Actual emissions reductions may vary from the data provided.

REDUCING GREENHOUSE GASES:

A 1998 biodiesel lifecycle study, jointly sponsored by the U.S. Department of Energy and the U.S. Department of Agriculture, concluded biodiesel reduces net carbon dioxide emissions by 78 percent compared to petroleum diesel. This is due to biodiesel's closed carbon cycle. The CO₂ released into the atmosphere when biodiesel is burned is recycled by growing plants, which are later processed into fuel. These numbers are based on virgin soy oil. As higher percentages of recycled oils, animal fats and low-input alternative feedstocks are used in production, the closer biodiesel reaches carbon dioxide neutrality.

BIODEGRADABLE AND SAFE:

100% pure biodiesel is non-toxic and biodegradable. Its flash point is 150° higher than diesel, making it the safest fuel on the market. It is 10 times less toxic than salt, and it biodegrades quickly-- even helping clean up conventional diesel spills.

CONVERTING "WASTE" INTO ENERGY:

Biodiesel can be produced cheaply from widely available and recyclable feedstocks. Many of these feedstocks are by-products that until now have had little market value; they include waste cooking oil, mustard seed, animal fats, and soy bean oil.

MORE INFORMATION:

To learn more about biodiesel's environmental benefits, please visit www.communityfuels.com.

BIODIESEL EMISSIONS COMPARED TO CONVENTIONAL #2 DIESEL ISSUES

EMISSION TYPE	B20	B100
Carbon Dioxide	-16% to -19%	-78% to -99%
Unburned Hydrocarbons	-20% to -30%	-67% to -93%
Carbon Monoxide	-12% to -20%	-48% to -50%
Particulate Matter	-12% to -22%	-30% to -47%
NOx	-2% to +2%	+4% to +13%
Sulfates	-19% to -20%*	-98% to -100%
Toxics**	-13% to -50%	-80% to -90%

*Estimated from B100 results

** Toxics: Reports vary in their description of toxics tested. Some refer to Toxic HCs, while others refer to PAHs and NPAHs. For simplification, data for each of these have been included under the toxics category.