DC Biofuels, LLC

A Presentation to the D.C. Water & Sewer Authority June 28, 2010

What is DC Biofuels?

- Founded and incorporated in the District of Columbia.
- Established to develop an urban-based biodiesel production model in Washington, DC.
- Designed to process multi-feedstocks including "waste" vegetable oils (WVO), yellow grease, and brown grease into high-quality biodiesel (ASTM D 6751).
- Customers will include local public & private fleets, keeping the fuel-cycle almost entirely within the Washington, DC metropolitan area.

What is DC Biofuels?

- Business model is built around a low-carbon footprint.
- Biodiesel can displace up to 20vol% of conventional diesel fuels sold commercially.
- Biodiesel reduces U.S. dependence on petroleum as a transportation fuel source.
- Biodiesel blends can reduce vehicle emissions of hydrocarbons, particulate matter, air toxics & carbon monoxide.
- Biodiesel blends enable regulated fleets to meet DOE alternative fuel equirements (EPACT).

The DC Biofuels Team

- DC Biofuels, LLC is a subsidiary of Enova Energy (Orlando, FL), a broad-based energy investment & management firm.
- Process & construction engineering provided by SAIC, EnergyOne, LLC (<u>www.energyone.com</u>) and Pacific Biodiesel, Inc. (<u>www.biodiesel.com</u>).
- DC feedstock collection partners include Urban Service Systems Corp. (<u>www.urbanssc.com</u>).
- Verified biodiesel emissions reduction additive provided by Oryxe (<u>www.oryxe.com</u>).
- Supply & distribution of finished fuel arranged via Quarles Petroleum, Inc. (<u>www.quarlesinc.com</u>).
- Other supply & fuel distribution partners pending.

The DC Biofuels Approach

- Local multi-feedstock supply availability & large fleet customers (DC DPW, WMATA, etc.) reduce operating & transportation costs and help ensure profitability.
- Five-million gallon per year (MGY) plant to be located in N.E.
 Washington, capable of producing 25 MGY of the cleanest biodiesel blends (B20) in the United States.
- <u>Timetable</u>: Groundbreaking in 3rd Quarter 2010, operations starting in 2nd Quarter, 2011.
- DC Biofuels is committed to local job creation & a 21st century energy training program for DC.
- DC Biofuels/Enova Energy plan 8 10 more similar plants east of the Mississippi River by 2013.

The DC Biofuels Approach

U.S. and Other Successful Brown Grease-to-Biodiesel Case Studies:

- San Francisco, CA
- Honolulu, HI (Pacific Biodiesel)
- Philadelphia, PA (Black Gold)
- Richmond, VA
- Hoover, AL (municipal project)
- The Bahamas

The DC Biofuels Process

- Brown grease is filtered, dewatered and pre-treated before conventional transesterification process.
- Feedstock is processed with all others collected (WVO, Yellow Grease, etc.), producing methyl ester (biodiesel) and crude glycerin.
- Extracted waste water would be discharged into the sewer system.
- Residual brown grease solids would be landfilled as appropriate, gasified, or sold into other markets.

- DCB would serve WASA as its central brown grease collection substation at its biodiesel production facility;
- DCB's facility would collect, receive, and process this material into ASTM D 6751-grade biodiesel for blending into diesel fuel for use in DC public and private fleets, including WASA;
- WASA would permit DCB to discharge the extracted waste water into the sewer system at no charge to DCB;
- DCB would agree to enter into a ten-year supply agreement with WASA to receive this material, subject to renewal for additional periods, commencing in 2nd quarter of 2011.

Advantages to WASA:

- Brown Grease Collection by DC Biofuels instead of WASA (operations' and logistics' savings).
- Brown Grease processing by DC Biofuels (chemicals and energy savings).
- Glycerin availability & supply by DC Biofuels to WASA.
- Avoidance of WASA capital expenditures.
- B20 supply to WASA fleet vehicles.

- DC Biofuels represents a near- to long-term solution for WASA's Brown Grease dilemma.
- Longer-term, DC Biofuels/Enova Energy could assist WASA with Brown Grease gasification technology.
- The DCB-WASA partnership would be unique and groundbreaking, a model for the nation.
- WASA would gain substantial public relations benefits from the relationship with DC Biofuels in supporting clean biofuels production in the nation's capital, new jobs, etc.

Next Steps/Q & A

DC Biofuels, LLC

Wendell Jenkins, President James Peeples, Esq., Senior Vice President

> 1425 K Street, NW; Suite 350 Washington, DC 20005 (202) 587-5782

> > www.DCBiofuels.com