

September 3, 2013

The Honorable Ed Whitfield
Committee on Energy and Commerce
Subcommittee on Energy and Power
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Whitfield:

Thank you for your letter of August 19, 2013 requesting additional information for the record of the Subcommittee on Energy and Power's July 23, 2013 hearing entitled "Overview of the Renewable Fuel Standard: Stakeholder Perspectives."

The purpose of this letter is to provide the requested information in your prescribed format.

(1) The Honorable Lee Terry

1. During the hearing, you were explaining the extent to which advanced biofuel technologies are being developed for military and commercial aviation purposes. Please elaborate.

a. Please list specific projects that are either in development or have recently come on line that the Advanced Biofuels Association would like to highlight for the record.

Advanced biofuels technologies are rapidly developing and approaching commercial cost competitiveness for military applications and commercial aviation. The advanced biofuels industry is increasingly focused on producing renewable fuels that meet military specifications for jet, marine, diesel and gasoline. Critically, these 'drop-in' fuels can be used seamlessly with existing infrastructure and blended without restriction into petroleum-based fuel supplies.

KiOR, for instance, is a next-generation renewable fuels company that has developed a proprietary technology platform to convert biomass into crude oil. They utilize cellulosic materials such as wood and forestry residuals and process them into gasoline, diesel and fuel oil blendstocks. The company built the first commercial scale cellulosic fuel facility in Columbus, Mississippi, which began shipping fuel in early 2013 and has 13 million gallons per year of production capacity.

Airlines that are activity flying routes using biofuels or are actively planning to do so in near future include: Alaska Airlines, United Airlines, KLM Dutch Royal Airlines, and China Eastern Airlines. Airlines that have tested biofuels in aircraft include: Virgin Atlantic, Air New Zealand, Japan Airlines, TAM, LAN, Air China, and Singapore Airlines.

Of the many new technologies and projects that can be applicable to military and commercial aviation, ABFA is pleased to highlight several notable examples of defense advanced biofuels projects.

The 2012 Rim of the Pacific (RIMPAC) exercise, the world's largest international maritime exercise, demonstrated advanced biofuels made from used cooking oil and algae in Naval vessels and aircraft including the USS NIMITZ (CVN 68) and Carrier Air Wing ELEVEN, USS CHAFEE (DDG 90), USS CHUNG HOON (DDG 93), USS PRINCETON (CG 59), and USNS HENRY J KAISER (T-AO 187). According to the Navy,

- "Navy surface ships were powered using 350,000 gallons of hydroprocessed renewable diesel (HRD-76) blended with an equal amount of marine diesel (F-76).
- Navy aircraft burned 100,000 gallons of hydroprocessed renewable jet fuel (HRJ-5) blended with aviation fuel (JP-5)."

Fuel for the 2012 RIMPAC was provided by Dynamic Fuels from non-food waste cooking oil produced at their plant in Geismar, Louisiana along with algae based fuel from Solazyme. The Dynamic Fuels plant is a first of its kind \$200 million facility capable of producing 75 million gallons of renewable diesel per year.

Other Defense funding, notably through the Defense Production Act's Advanced Drop-In Biofuels Production Project, is supporting key project areas. The DPA Biofuels initiative is currently funding engineering work and will complete the design, construction and/or retrofit, and operation of domestic commercial-scale integrated biofuels production enterprises (IBPE) that produce at least 10 million gallons per year of drop-in liquid transportation fuels targeted for military operational use, approved and certified as MILSPEC JP-5, JP-8 and/or F-76. Four companies are moving forward with projects: Emerald Biofuels LLC of Illinois, Natures BioReserve LLC of Nebraska, Fulcrum Brighton Biofuels LLC of California, and Red Rock Biofuels of Colorado.

Sincerely,



Michael McAdams
President
Advanced Biofuels Association