

# NESTE OIL

December 5, 2006

Robert Okamoto  
Industrial Section  
Air Resources Board  
P.O. Box 2815  
Sacramento, California 95814

Via email to: [rokamoto@arb.ca.gov](mailto:rokamoto@arb.ca.gov)

## **Subject: Neste Oil Comments on Revised ARB Draft Advisory on Biodiesel Use dated November 14, 2006**

Neste Oil is considering the construction of facilities in California to convert biomass (either animal fat or vegetable oil) into diesel fuel. The investment required will be in excess of 100 million US dollars therefore it is imperative that Neste know and understand California's regulations and laws that govern the use of diesel fuel made from biomass. Neste appreciates the time and effort that ARB staff has invested in preparing the "ARB Draft Advisory on Biodiesel Use". Neste's comments and questions concerning the draft advisory are intended only to make sure Neste is correctly interpreting the "ARB Draft Advisory on Biodiesel Use".

### **DEFINITION of BIODIESEL**

In the second Paragraph of the section titled "Background" ARB states: "Biodiesel is required to meet the American Society of Testing and materials (ASTM) D-6751 specification..." Neste is interpreting this to mean that when ARB uses the term biodiesel in this draft document that ARB is referring to the biodiesel fuels that are mono-alkyl esters. Because there are other biodiesel fuels that can and are being made from renewable biomass resources and to eliminate possible confusion, Neste requests that when ARB uses the term "biodiesel" and they are referring to the mono-alkyl esters that they use the phrase "biodiesel (mono-alkyl esters)" Neste's basis for this request is as follows:

Outside of the United States the term biodiesel refers to all diesel fuels produced from biomass resources. Because of the Worldwide recognition of the term biodiesel, Neste would like to use "biodiesel" when describing the hydrocarbon diesel product produced in Neste's second generation biodiesel technology. However in the United States there is some confusion concerning what is and what is not biodiesel. The U.S. Environmental Protection Agency (USEPA) provided guidance on how to deal with this name problem when they answered the question, "What is Biodiesel?" in their *September 7, 2006, Notice of Proposed Rulemaking (NPRM) concerning the Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program*. (See Attachment 1.)

USEPA examined the definitions of renewable fuel from the Energy Policy Acts of 1992 and 2005 and proposed that the definition of biodiesel includes both mono-alkyl esters and non-ester fuels. USEPA proposed "to divide the Act's definition of biodiesel into two separate parts: biodiesel (mono-alkyl esters) and non-ester renewable diesel. The combination of "biodiesel (mono-alkyl esters)" and "non-ester renewable diesel" in the regulations would fulfill the Act's definition of biodiesel." Therefore, it would eliminate confusion and provide consistency between Federal and State government terminology if California were to use the phrase "biodiesel (mono-alkyl esters)" when referring to the ester product and phrase "non-ester renewable diesel" when referring to second generation renewable diesel fuel products like Neste's NExBTL®, the product of BP's tallow hydrogenation project in Australia, the product of ConocoPhillips' vegetable oil refining process in Ireland, the product of Choren's biomass gasification/GTL diesel or the products of future renewable diesel technologies.

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## **DEFINITION OF DIESEL FUEL**

Neste's NExBTL® product is a liquid hydrocarbon that contains less than 1 ppm sulfur and less than 0.1 vol% aromatics and that meets ASTM D-975 standards when properly additized with typical ultra low sulfur diesel (ULSD) fuel lubricity additives. Therefore, it meets California diesel fuel regulations. Therefore, Neste is interpreting the "Draft Advisory on Biodiesel Use" to indicate that NExBTL® use is not subject to the volume percent limitations to which biodiesel (mono-alkyl esters) is subject.

Furthermore, because NExBTL® with typical ULSD fuel lubricity additization satisfies the less than 15 ppm sulfur, less than 10 vol% aromatics, minimum lubricity and ASTM D-975 standards set forth in the California diesel fuel regulations Neste is interpreting that NExBTL® is not an alternative diesel fuel subject to review under multimedia evaluation.

## **CLOSING**

Neste appreciates the time and effort ARB put forth in publishing this Draft Advisory on Biodiesel. Summarizing the complex state laws and regulations in one place has been invaluable in helping Neste understand and interpret California's laws and regulations concerning diesel fuel and biodiesel. We look forward to ARB using the "biodiesel (mono-alkyl esters)" terminology where appropriate in the Advisory on Biodiesel. Also, because NESTE is considering making a significant investment in producing non-ester renewable diesel fuel that meets California diesel fuel standards in California we will appreciate ARB's comments concerning our interpretations concerning allowable blend concentrations and multimedia evaluations.

For Neste Oil,

Henrik Erämetsä  
Vice President, US Operations

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Attachment 1

## **DEFINITION OF BIODIESEL**

*The following definition of biodiesel has been extracted from U.S. EPA's September 7, 2006, Notice of Proposed Rulemaking concerning the Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program. It includes both Mono-Alkyl Esters and Non-Ester Renewable Diesel.*

### **What is Biodiesel?**

The definition of renewable fuel in the Act includes corn-based and cellulosic biomass ethanol, waste derived ethanol, waste derived ethanol and the renewable fuel portion of blending components derived from renewable fuel. Biodiesel is also specifically named as being included in the Act's definition of renewable fuel. The Act states that "The term "renewable fuel" includes...biodiesel (as defined in section 312(f) of the Energy Policy Act of 1992." This definition, as modified by Section 1515 of the Energy Act states:

***The term "biodiesel" means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title, and includes biodiesel derived from animal wastes, including poultry fats and poultry wastes, and other waste materials, or municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater.***

This definition of biodiesel would include both mono-alkyl esters which meet ASTM specification D-6751\* (the most common meaning of the term "biodiesel") that have been registered with EPA, and any non-esters that are intended for use in engines that are designed to run on conventional, petroleum-derived diesel fuel, have been registered with the EPA, and are made from any of the feedstocks listed above. To implement the above definition of biodiesel in the context of the RFS rulemaking while still recognizing the unique history and role of mono-alkyl esters meeting ASTM D-6751, we propose to divide the Act's definition of biodiesel into two separate parts: biodiesel (mono-alkyl esters) and non-ester renewable diesel. The combination of "biodiesel (mono-alkyl esters)" and "non-ester renewable diesel" in the regulations would fulfill the Act's definition of biodiesel. The Agency solicits comment on this approach and specifically asks

whether the "non-ester renewable diesel" definition be referenced explicitly to ASTM D-975.

**Biodiesel (Mono-alkyl Esters)** Under this part, the term "biodiesel (mono-alkyl esters)" means a motor vehicle fuel which: 1) meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title (Clean Air Act Section 211); 2) is a mono-alkyl ester; 3) meets ASTM specification D-6751-02a; 4) is intended for use in engines that are designed to run on conventional, petroleum-derived diesel fuel, and 5) is derived from non-petroleum renewable resources including, but not limited to, animal wastes, including poultry fats and poultry wastes, and other waste materials, or municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater.

**Non-Ester Renewable Diesel** The term "non-ester renewable diesel: means a motor vehicle fuel which: 1) meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title (Clean Air Act Section 211); 2) is not a mono-alkyl ester; 3) is intended for use in engines that are designed to run on conventional, petroleum-derived fuel, and 4) is derived from nonpetroleum renewable resources including, but not limited to, animal wastes, including poultry fats and poultry wastes, and other waste materials, or municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater. current examples of a non-ester renewable diesel include: "renewable diesel" produced by the Neste process, or diesel fuel produced by processing fats and oils through a refinery hydrotreating process.

[\\* In the event that the ASTM specification D-6751 is succeeded with a different number in the future, EPA may revise the regulations accordingly at such time.](#)