



## Quality Fuels & The National Biodiesel Board and Their Role in Biodiesel

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## National Biodiesel Board

- ◆ Biodiesel Trade Association, Members:
  - Feedstock groups, biodiesel suppliers, biodiesel and petrodiesel distributors, support industries
- ◆ Operational since 1992
- ◆ Annual Budget 1.5 to 3 MM
- ◆ Headquarters: Jefferson City, Missouri
- ◆ CEO: Mr. Joe Jobe



## Some NBB History

- ◆ Started by 11 soybean boards in the Midwest in 1992: National Soydiesel Development Board
- ◆ 1995: Changed to National Biodiesel Board
  - Represent and encourage all feedstocks
  - Feedstock neutral
- ◆ Late 1990's: Allowed biodiesel supply companies as full voting members
- ◆ 2004: Changed to 16 member Gov. Board



## National Biodiesel Board

- ◆ Core Functions (constant each year)
  - **Industry Coordination/Prioritization**
  - **Industry Communication**
  - **Liaison with Government Agencies and Academia, Voice of Industry**
  - **Information Dissemination and Website**
- ◆ Program Priorities
  - High Priorities that change from year to year



## Priority Process of the NBB

- ◆ NBB staff and contractors ask for input:
  - Annual Brainstorming conference (now National Biodiesel Conference and Trade Show)
  - Feedstock Groups, Producers and Marketers
  - Petroleum Producers and Marketers, OEM's, others
- ◆ Committee Structure:
  - Technical, Marketing, Regulatory, Legislative Adhoc, Individual Market Task Force Groups
- ◆ Committees Recommend, Full Board Votes



## NBB Technical Program Mission

- ◆ Support NBB priorities:
  - Reduce or eliminate barriers to sales
    - Examples: OEM Program, Standards and Fuel Quality
  - Quantify benefits
- ◆ Be recognized as a leading source for credible technical information
- ◆ Be recognized as the source of coordination with industry, academia, and government agencies

## NBB Technical Priorities

- ◆ Secure positive B20 position statements
- ◆ Encourage B20 in future engine designs
- ◆ Maintain and improve ASTM standards
  - Manage BQ-9000 fuel quality program
- ◆ Technical data to ensure fuel legitimacy
- ◆ Coordinate technical programs with others
- ◆ Provide overall technical support
  - White papers
  - Other info requests

## ASTM Standards

- ◆ Steve Howell, ASTM Biodiesel TF Chair
- ◆ 2 standards exist, being updated:
  - D6751, B100 for blending (stability, others)
  - D 975, diesel fuel (up to 5% biodiesel)
- ◆ 2 new standards proposed:
  - Separate B20 finished blend standard
  - B100 for pure fuel use
- ◆ Analytical methods being updated
  - GC replacement, Flash, Cetane, Blend level

## ASTM D 6751

<u>Property</u>	<u>ASTM Method</u>	<u>Limits</u>	<u>Units</u>
Flash Point	93	130 min.	degree C
Water & Sediment	2709	0.05 max.	vol.%
Carbon Residue (100% sample)	4530	0.05 max.	wt. %
Sulfated Ash	874	0.02 max.	wt. %
Kin. Viscosity, 40C	445	1.9 - 6.0	mm <sup>2</sup> /sec.
Sulfur, S 500	5453	500 max.	ppm
Sulfur, S 15	5453	15 max.	ppm
Cetane	613	47 min.	
Cloud Point	2500	By Customer	degree C
Copper Corrosion	130	No. 3 max.	
Acid Number	664	0.80 max.	mg KOH/g
Free Glycerin	6854	0.020	wt. %
Total Glycerin	6854	0.240	wt. %
Phosphorous	4951	10 max	ppm
Distillation, T90 AET	1160	360 max	degree C

## What is BQ-9000?

- ◆ Company Certification Program
  - Provides confidence that companies producing and selling biodiesel meet ASTM D 6751
- ◆ Meets D 6751 when produced
- ◆ Maintains D 6751 throughout distribution
- ◆ Quality Manual in place, and being used

## NBAC

- ◆ NBAC: National Biodiesel Accreditation Commission
- ◆ NBAC developed BQ-9000
- ◆ Independent committee of the NBB
- ◆ Commissioners represent wide scale of interested parties
- ◆ Appointed by the NBB President, and approved by the NBB Board of Directors

## NBAC

- ◆ Although committee of NBB, NBAC has full authority for design and implementation of BQ-9000
- ◆ NBB can not 'over ride' NBAC
- ◆ Many meetings, conference calls, etc.
- ◆ Developed BQ-9000 as it stands today
- ◆ Responsible for on-going improvements to BQ-9000

## NBAC Commissioners

- ◆ Leland Tong, Chair
- ◆ Rod Lawrence, Vice
- ◆ Lyle Howard
- ◆ George Kopitke
- ◆ Myron Danser
- ◆ Paul Henderson
- ◆ Gene Gebolys
- ◆ Gary Pearl
- ◆ Dick Prascher
- ◆ Danny Norton

### NBB Staff Support:

- Joe Jobe
- Tammy Sachse

### Immediate Past Chair

- Steve Howell

### NBB Legal:

- Mark Truesdell

## BQ-9000: Some Details

- ◆ Two accreditations possible for companies:
  - BQ-9000 Accredited Producer
  - BQ-9000 Certified Marketer
- ◆ BQ-9000 accredits companies, not fuel
  - There *is no such thing* as 'BQ-9000 Biodiesel'
  - BQ-9000 does, however, help insure that biodiesel produced and sold will meet D 6751
- ◆ There is *no logo* for accredited producer
- ◆ There is *a logo for certified marketer*

## BQ-9000 Certified Marketer



## Why Two Accreditations?

- ◆ Biodiesel production companies may not be the company who sells to the end user
- ◆ Biodiesel sales companies can purchase methyl esters from a variety of sources
- ◆ Some companies who make biodiesel are not 'in the biodiesel business' and do not monitor to D 6751 (i.e. oleochemical)
- ◆ The most important accreditation is that for the company who sells to the end user

## Why Two Accreditations?

- ◆ Two ways to become a Certified Marketer:
  - Buy from an Accredited Producer and use their analytical results (mostly)
  - Buy from someone else, and confirm the product meets D 6751 through analysis yourself
- ◆ Encourages marketers to buy from Accredited Producers
- ◆ Encourages producers to become accredited
- ◆ Allows market flexibility, while helping to assure that product meets D 6751

## Benefits of BQ-9000?

- ◆ Implements the nationally accepted standard, ASTM D 6751
  - Makes purchasing—and selling—easier
  - If you don't use D 6751, every sales transaction must be negotiated and re-contracted
  - This can be time intensive and frustrating!
  - Minimizes the tendency of each user asking for different requirements in contracting and purchasing agreements



## Benefits of BQ-9000?

- ◆ Saves biodiesel producers time—and money—by minimizing problems with out of specification fuel
- ◆ Saves biodiesel marketers time—and money—by not needing to deal with fuel returns and customer problems ....or the potential loss of a customer
- ◆ Saves marketer and user money by taking advantage of the producer quality assurances



## Benefits of BQ-9000?

- ◆ Provides the **biodiesel users** (individuals, companies, fleets, government agencies, etc.) with a feeling of **confidence**
  - ◆ Provides the **engine and vehicle companies** with a feeling of **confidence**
- which is critical in the developing stages of this new and exciting industry



## BQ 9000 Registration Process

- ◆ Complete the Application
- ◆ Submit Quality Manual and Warranty Info
- ◆ Pass Initial Audit, Surveillance Audits
- ◆ Pay the Fees
  - First time (good for 2 years)
    - \$ 750 application fee
    - \$ 2,500 initial audit fee
  - Every 2 years
    - \$1,750 surveillance audit fee
- ◆ Provide proof of EPA Registration



## BQ 9000 Registration Process

- ◆ Application Received
- ◆ Desk Audit performed by Auditor
  - Interaction with applicant
- ◆ On-site Audit scheduled and Performed
- ◆ Any non-conformances addressed
- ◆ Accreditation Received!



## BQ-9000 Current Status

- ◆ One BQ-9000 Accredited Producer:

**Peter Cremer, NA**

- ◆ Marketers: Buy from Peter Cremer!!!
- ◆ Modifying BQ-9000 to reduce some of the ISO type paperwork requirements



## BQ-9000 Summary

- ◆ Provides **confidence** to **USERS** and **OEMs**
- ◆ Helps assure that only D 6751 product is sold to customers
- ◆ Saves Producers \$\$\$\$\$
- ◆ Saves Marketers \$\$\$\$\$
- ◆ Saves Users \$\$\$\$
- ◆ Helps to build the market for this exciting renewable, domestic, clean burning fuel