

**ATTACHMENT A**

**A RESOLUTION TO COOPERATE WITH PIEDMONT BIOFUELS**  
Resolution No. 38/2004-05

WHEREAS, the Carrboro Board of Aldermen seeks to ensure that its existing and proposed policies and regulations are conducive to employing alternative fuel options and overall increased energy efficiency; and

WHEREAS, staff has evaluated the request of Piedmont Biofuels for the Town of Carrboro collaboration on a Triangle Clean Cities grant,

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Aldermen direct staff to proceed with final plans for placement of a 500-gallon B100 fuel tank at the Public Works facility for a maximum period of one year, provided an acceptable site can be identified and necessary permits can be obtained.

This is the 12th day of October in the year 2004.

-----Original Message-----

From: Leif Forer [mailto:leif@biofuels.coop]  
Sent: Thursday, September 02, 2004 1:38 PM  
To: George E. Seiz; Pete White; Noah Ranells  
Cc: Lyle Estill; rachel Burton  
Subject: B100 Tank @ Public Works

George, Phil, and Noah~

Thanks for meeting with me to discuss the possibility of siting a biodiesel (B100) tank and pump at the Public Works site. You expressed a number of concerns that I promised to respond to in writing. Please circulate this memo to anyone you feel would be interested. (Perhaps Steven Stewart and the Town attorney?).

#### The Premise

Piedmont Biofuels, a local cooperative biodiesel distributor, in conjunction with the Triangle Clean Cities Coalition is proposing to install a 100% biodiesel tank and pump at the Town of Carrboro's Public Works facility. Pure biodiesel (B100) is superior to B20 in it's phenomenal emissions benefits, in increased safety and health benefits, in local economic development, and agricultural support. It is 100% renewable and 100% independent of oil.

We strongly support the EAB's recommendation to initiate a pilot program in which two fleet vehicles operate on B100. We commend the Town of Carrboro for being a long standing progressive leader in North Carolina and nationally. You lead in B20 and now you have the opportunity to go all the way and lead in B100!

The B100 tank would be supplied and installed (perhaps we would lease the tank for \$1) so that the B100 fleet vehicles could fill up on site. We also would like to permit trained co-op members (we estimate 12 per week) to also use the B100 pump. The pump would be self-serve and all liability would be the sole responsibility Piedmont Biofuels.

#### Addressing Concerns

1. Cost. Our proposal effectively eliminates all capital equipment costs to the Town for 500 gallons of B100 refueling infrastructure. The Town purchase price for pure B100 would be \$3.00 per gallon (assuming exemption from State and Federal excise tax) otherwise it is \$3.50 all taxes included. The pump would require a 110 volt AC electric hookup. The cost of electricity for operating a single low flow pump (15 GPM or less) would be nominal and we would pay for it. The only additional costs to anticipate are a couple of replacement fuel filters for the test vehicles and possibly a fuel tank or line heater for extremely cold operating conditions.
2. Liability. Co-op members who are not Town employees would fill up at the B100 pump. Is the Town liable in any way? We can have each co-op member sign a waiver of liability. (At Central Carolina Community College where I teach each student pays \$1.25 for a semester's worth of insurance coverage. Perhaps the Town has a similar policy in place or, perhaps, it is unnecessary.)
3. Zoning, Permitting, Inspections. Trish McGuire confirmed that the Public Works site is zoned for gasoline sales which is the closest category we fit into. Stan Foushee has no concerns but would like to inspect us when we're setup. Mike Canova would like to show us where to site the tank. I am not aware of any environmental permits we require.
4. Cold Weather Operation. 100% biodiesel does cloud at higher temperatures than conventional diesel so we take a number of precautions to ensure flawless operation during cold months. We use virgin soy biodiesel for it's good cold flow properties and blend it with a winterizing additive to further decrease cloud point. For extremely cold nights and days parking in a garage or using a fuel tank or line heater is recommended.

5. Rubber Degradation. We do not recommend using natural rubber which is sometimes found in pre-1994 vehicles with B100 because it will degrade over time.

6. Extra Work for Staff. The B100 pump would be self-serve and would not be open to the public. Trained co-op members would be the only ones accessing the pump and would log the gallons they pumped and leave a check in the cash box affixed to the tank stand. We would clearly post our phone number on the tank and members would know to call us and not approach the Town staff with questions or concerns.

7. Increased Traffic on Site. We estimate about 12 members using the tank weekly.

8. Terms. We would consider siting the tank at Public Works for a period of 6 months to 1 year. We would be fully responsible for the maintenance of the refueling apparatus and would exempt the Town of all liability associated with the use of the tank or the co-op members who use it. Our biodiesel is fully warranted through our supplier, World Energy.

9. Health and Environment. Compared to gasoline and diesel, biodiesel is extremely safe. Pure biodiesel is not a hazardous material. It is biodegradable, nontoxic, nonflammable, and nonexplosive. According to the USDA biodiesel is ten times less toxic than table salt and biodegrades as fast as sugar.

10. Emissions. The emissions from pure biodiesel are very clean. According to the EPA smog and ozone forming hydrocarbons and poisonous carbon monoxide are reduced by 67% and 48% respectively. Total particulate matter, recognized as a contributing factor in respiratory disease, is reduced by 47%. Emissions of nitrogen oxide which contribute to smog and ozone formation in the presence of unburned hydrocarbons have been shown to increase as little as 10%. Sulfate emissions, a major component of acid rain, are completely eliminated. Cancer causing polycyclic aromatic hydrocarbons and nitrated PAH's are reduced 80% and 90% respectively. NREL found that the life-cycle carbon dioxide emissions (greenhouse gas) are completely eliminated.