




Office of the City Manager

INFORMATION CALENDAR

July 18, 2006

To: Honorable Mayor and
Members of the City Council

From:  Phil Kamlarz, City Manager

Submitted by: Claudette Ford, Director, Public Works Department

Subject: Use of Biodiesel Fuel

INTRODUCTION

This is a progress report regarding the City of Berkeley's return to using 20% biodiesel fuel (B20) in its diesel fleet.

CURRENT SITUATION AND ITS EFFECTS

On May 26, 2006, after receiving quality assurances from our current vendor, the City returned to fueling diesel powered vehicles and equipment with 20% biodiesel (B20) on a temporary basis. Staff intends to issue an invitation for competitive bids in July 2006 for a new vendor.

Originally, staff intended to join the City and County of San Francisco's fuel bid process that included detailed specifications addressing quality control issues and problems that the City has experienced with biodiesel. However, after further research, staff realized that the City would benefit by sending out its own bid proposal specific to the City's needs for a vendor capable of providing biodiesel, unleaded gasoline, and all other fuel, oil and lubricants for the City's fleet and equipment.

Current Biodiesel Use. City diesel vehicles and equipment at the transfer station and the corporation yard are now being fueled by 20% biodiesel (B20). The current annual usage of B20 is approximately 184,500 gallons a year.

Current Costs. As of May 2006, Ultra Low Sulfur Diesel (ULSD) costs \$2.80 per gallon, 20% Biodiesel Mixture (B20) costs \$2.89 per gallon, and 100% Biodiesel (B100) costs \$3.00 per gallon. Prices have increased dramatically for ULSD. Last year alone, ULSD averaged \$1.50 per gallon. Based on the most recent price list from our current vendor, the estimated annual cost for 184,500 gallons a year is \$516,600 for ULSD, \$533,205 for B20, and \$553,500 for B100.

Regulatory Compliance. There was concern about the rise in nitrogen oxide (Nox) emissions (thought to contribute to global warming and trigger respiratory problems) with the use of biodiesel fuel. However, tests by the Environmental Protection Agency (EPA) have shown that biodiesel fuel used in new engines may generate NOx emissions at 5% below ultra low sulfur

diesel. Particulate matter traps and catalytic converters can be used to further decrease emissions.

Environmental/Social Impacts. The City is committed to decreasing negative environmental impacts, improving the air quality for the Berkeley community and reducing our reliance on fossil fuels.

BACKGROUND

In an effort to get the best quality and price for fuel, oil, and lubricants used in City vehicles and equipment, staff plans to send out a competitive bid solicitation this July. Our bid specifications will mirror the City and County of San Francisco's bid, but will be more specific in addressing the City of Berkeley's requirements.

The specifications will include samples and testing of biodiesel fuel for quality assurance, and the vendor's ability to deliver smaller quantities of fuel to our seven fire stations, and to the Civic Center and Public Safety Buildings.

POSSIBLE FUTURE ACTION

The future cost of fuel is uncertain due to the volatility of oil prices. For this reason, we would like to select a vendor committed to providing top quality fuel as well as keeping the costs of biodiesel and other petroleum based products at a reasonable level.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

With the cost of ULSD diesel rising, and the cost of biodiesel remaining stable over the past few years, the gap between them has been reduced. Staff anticipates fuel costs associated with the use of B20 Biodiesel to increase approximately \$15,000 to \$20,000 annually above current ULSD diesel fuel pricing based upon the City's fleet annual consumption levels.

CONTACT PERSON

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