



Information Item

Date: May 1, 2009

To: Mayor and City Council
From: Carol Swindell, Director of Finance
Subject: Update on Purchase of Biodiesel

Introduction

This is to update the City Council on the progress of the competitive formal bid process for the procurement of biodiesel.

Background

In May 2007, City staff opened a competitive bid process to secure a contract for the supply of biodiesel for the Big Blue Bus and the City Yards. In August 2007, the City hired Gladstein, Neandross, and Associates (GNA) to provide needed technical expertise in the evaluation of the bids. Following this evaluation of the submitted proposals, General Petroleum was identified as the most competitive bidder and staff recommended that Council award a contract, accordingly. At the July 23, 2008 City Council meeting, Council requested more information and approved a six-month contract with General Petroleum. In August 2008, staff again solicited bids for the purchase of biodiesel and returned to Council in December 2008 to again recommend an award of contract to the most competitive bidder, General Petroleum. Council granted a limited extension of the contract pending more information from staff.

The Bidding Process

The request for proposal (RFP) required bidders to utilize the OPIS (Oil Price Information Service) indices for both the mixture (B99) and the diesel components of the biodiesel. OPIS is the most widely accepted fuel price benchmark for supply contracts

and competitive positioning. Nearly 100 billion gallons of fuel are pegged annually to OPIS rack, retail and spot prices for U.S. gasoline, diesel, LP-gas, jet fuel, crude, propane, feedstocks, resid, kerosene, ethanol and biodiesel. OPIS is relied on as the benchmark because OPIS remains completely unbiased and independent. OPIS has no stake in fuel transactions, is not funded by oil industry initiatives, and strictly adheres to antitrust guidelines determined by independent legal counsel. The specifications set forth in the RFP required bidders to use the OPIS Gross Wholesale B99 SME (Soy Methyl Esters) biodiesel low rack price for Los Angeles (as of August 11, 2008) to price the B99 mixture component. Based on information provided by the consultant, GNA, this index continues to be the only local index for pricing the B99 component for our region. Bidders constructed per gallon prices based on the indexed costs for Ultra Low Sulfur Diesel (ULSD), B99 SME, applicable taxes, and a markup for delivery and handling. The specifications of the bid ensured that vendors could only exercise discretion over the markup, as commodity pricing was tied to the OPIS indices and taxes are legislatively set.

Minimum product specifications provided by the City to potential vendors required that the fuel must be produced in the United States and that the preference for biodiesel mixture was (in order): (1) recycled cooking oil and yellow grease from the state of California, (2) first-use feed stocks in or near the state of California, or (3) waste oil or feed stocks from the United States.

The OPIS SME index was recommended by the City's consultant for use in this bid process because no other indices are available for this region for biodiesel. The use of the OPIS index merely provides a pricing mechanism by which vendors communicate the commodity price in a way that can be evaluated by City staff. The use of the OPIS SME index does not preclude vendors proposing to provide the City with biodiesel derived from feed stocks other than SME from bidding. Feed stocks were not required to be identified by bidders during the process; however, the RFP process allowed one week for vendors to provide City staff with inquiries into any aspect of the bidding

process. It was expected that the successful vendor would provide the fuel from feed stocks in the order of preference listed in the RFP.

Alternative Indices

In evaluating which pricing index to use for this bid process, City staff examined alternative indices used in different regions of the State. Most institutional fuel purchasers use one of the OPIS indices for pricing. The City of Inglewood requires bidders to use OPIS and to provide information as to which specific OPIS index (or indices) they used in preparing their bid. The City of San Francisco is able to use a Yellow Grease OPIS index, which exists for that region. There currently no Yellow Grease OPIS index available for the Los Angeles region. OPIS has indicated that it will create a Yellow Grease index for Los Angeles when it becomes regularly sold in Los Angeles. It should be noted that indices for different regions, such as the San Francisco Bay Area, are not applicable to other regions.

Sustainability Issues

Biodiesel can be made from a variety of feed stocks, including plant-derived sources, such as soybean oil, palm oil, and other vegetable oils; animal-derived sources, such as tallow, lard, and poultry fat; and recycled oil and grease (yellow grease), usually obtained from restaurants and food processing plants. Numerous studies clearly show that the production and use of biodiesel (derived from any of these feed stocks) results in significantly lower lifecycle environmental impacts when compared to petroleum-derived diesel.

In comparing different types of biodiesel, life-cycle assessments that take into account energy and resource use related to its production from these various sources show that biodiesel made from yellow grease is the most sustainable option by a large margin, with the plant-derived sources being the least sustainable. This is because yellow grease is a re-used 'waste' product, whereas plant oils require significant energy, water and fertilizer inputs to produce and process animal fats are not considered a viable

long-term source of biodiesel due to the greater ecological impact of production and technical problems associated with congealing factors.

Another consideration related to biodiesel is the ecological impact of shipping. In general, greater shipping distances translate to larger environmental footprints of the fuel because they require more energy to get the fuel to the end user. For this reason, the RFP prioritized feed stocks in proximity to Santa Monica.

Biodiesel Supply and Availability

The biodiesel market is evolving, as are regulations and standards for the production and storage of this commodity. Consequently, fuel suppliers cannot consistently provide large amounts of biodiesel that meet the City's minimum standards from a single local source. Since the regional market currently provides no dependable supply of sustainable recycled feed stock, such as yellow grease, the City has had to prioritize feed stocks in bid specification and to accept plant-based biodiesel produced outside of California.

Plans for a local yellow grease biodiesel processing facility are currently underway by Tellurian Biodiesel, and this plant may provide a dependable source of B99 as early as this summer. Based on this, the City may be well served to continue purchasing biodiesel on a month-to-month basis and conducting a new RFP when this supply is available. A new RFP could then reasonably require that vendors provide a minimum percentage of locally produced, recycle feed stock and vendors may be afforded a new pricing mechanism in the form of a regional yellow grease OPIS index.

Issues Related to Biodiesel Storage

The City currently stores biodiesel in two 6500 gallon underground storage tanks (USTs) located at the City Corporate Yard, in two 40,000 gallon USTs at the Big Blue Bus Yard, and in one above ground storage tank at the Beach Maintenance Yard. In February, 2008, the State Water Resources Control Board (SWRCB) provided

clarification to regulations that apply to the storage of biodiesel in USTs. The SWRCB did so in anticipation of an increased use of renewable fuels as a result of the Energy Independence and Security Act. In short, the SWRCB subjects UST systems storing biodiesel or biodiesel blends to regulations that require the primary containment be approved by an independent testing laboratory, e.g. Underwriters Laboratories (UL), which would confirm compatibility with the product being stored.

Legislation was introduced last year that would have established interim standards and allowed biodiesel blends up to 20% biodiesel (B20) to be stored in USTs. However the bill was vetoed by the Governor, who went on to state that: “We need to be prepared to handle this situation in a manner that neither impedes the deployment of alternatives, nor sacrifices our other environmental goals, such as improved water quality.” The Governor then directed the California Air Resources Board (CARB) and SWRCB to work together to establish biodiesel and UST compatibility standards that can be consistently applied throughout the state. CARB and SWRCB have yet to agree on a satisfactory approach to the storage of biodiesel.

To date, UL has determined that its Standards and Certification for petroleum diesel storage in USTs can appropriately be applied *only to biodiesel in blends of up to B5*. UL is in the process of finalizing product safety requirements for equipment specified for use with biodiesel (B100) and biodiesel blends up to B20.

The SWRCB regards UL’s decision as a compatibility determination for the storage of biodiesel blends up to B5 in USTs approved for petroleum diesel. In other words, the SWRCB has determined that only USTs installed on and after July 1, 2004, that rely on vacuum, pressure or hydrostatic monitoring, which is not material property sensitive, can store biodiesel blends up to B5. The City stores biodiesel in USTs installed prior to July 1, 2004 and the City stores in these USTs biodiesel blends greater than B5. However, UL leak detection functionality testing with all other UST systems and for biodiesel blends beyond B5 is not yet complete.

Because of the double-walled construction of the City's USTs and leak detection systems, the otherwise compliant nature of the tank systems, the relative high quality of the biodiesel purchased by the City, and the absence of any negative impacts over the course of storage of biodiesel since February 2005, staff does not believe that the continued storage of biodiesel other than B5 in the City's pre- July 1, 2004 USTs presents a significant risk of leakage from the tanks.

Staff continues to monitor the situation and is investigating options that would allow the City to meet SWRCB standards and remain in compliance with all applicable laws and regulations. In the meantime, the SWRCB has not approved for underground storage the biodiesel blends greater than B5 used by the City. Also, the SWRCB has not approved for biodiesel storage the kind of USTs used by the City for such storage. Staff has not been informed of any financial penalties associated with the continued storage of biodiesel in City-owned USTs.

The City of Santa Monica is the local regulatory agency charged with enforcing SWRCB regulations within the City. Due to the absence of testing standards for the storage of biodiesel above B5 in USTs, the City cannot issue permits for any requests for the storage of biodiesel in USTs unless the storage meets the current very restrictive standards set by the SWRCB. Staff is currently determining a method for identifying facilities storing biodiesel at private sites. To date, however, no private owner of a USTs located in Santa Monica has submitted an application for a change in substance to biodiesel.

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