Memorandum

DATE: March 20, 2009

TO: Transportation and Environment Committee Members:
   Linda L. Koop (Chair) Sheffie Kadane (Vice Chair), Jerry R. Allen, Carolyn R. Davis,
   Voncie Jones Hill, Angela Hunt, Pauline Medrano, Ron Natinsky

SUBJECT: Sanitation Services FY 2009 Equipment Purchase

In 1992, the City purchased its first alternative fueled vehicle. In 2002, Dallas became
the first city in Texas to use biodiesel for its fleet. Greening the fleet has continued to
be an important factor in each fleet purchase. Today, the City has some 2,000 cars
and trucks that are either hybrid or alternate-fueled vehicles, making Dallas’ fleet the
largest and cleanest municipal fleet in the state – and one of the largest in the
country.

Our garbage trucks are no exception. Last year, Sanitation Services bought four (4)
hybrid refuse trucks to replace older diesel units, reducing the diesel fuel consumption
(and related tailpipe emissions) by an estimated 30%.

This year, Sanitation will replace 26 older diesel refuse trucks with CNG-fueled
(compared natural gas) units. This purchase is included in the Council Agenda for
March 25, 2009. These new trucks will reduce the emission levels by an estimated 83%.
Just as important as the environmental benefit, the life-cycle costs of
the new CNG trucks are estimated to save the City $1.1M over the cost of their diesel
counterparts.

<table>
<thead>
<tr>
<th>OPTION</th>
<th>Qty</th>
<th>TOTAL Truck Purchase</th>
<th>FUEL COST over life of truck</th>
<th>FUEL STATION COST</th>
<th>TOTAL COST IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNG TRUCKS</td>
<td>26</td>
<td>$3,748,534</td>
<td>$2,402,400</td>
<td>$0 *</td>
<td>$6,150,934</td>
</tr>
<tr>
<td>DIESEL TRUCKS</td>
<td>26</td>
<td>$3,263,168</td>
<td>$4,051,320</td>
<td>$0</td>
<td>$7,314,488</td>
</tr>
</tbody>
</table>

* Fueling station cost for CNG option is $500,000. However, the station cost is
incorporated into FUEL COST, and assumes a commitment to increase CNG truck
fleet to 40 units within 3 years.

Part of the cost savings comes in the form of a state-funded grant of $301,707 from
the General Land Office as an incentive to reduce air emissions. That amount will be
received upon delivery of the first 10 trucks. The department has also applied for an additional grant amount of $482,731 to be applied to the other 16 trucks.

The CNG refuse trucks, while having environmental and cost benefits, also pose a challenge operationally. The fuel tanks for the CNG refuse trucks are larger than the diesel fuel tanks – adding 16-23 inches in height to the truck. Any of these trucks that operate in alleys will encounter obstructions that have heretofore been missed (such as low tree limbs, sagging utility lines and building overhangs) – leading to costly damages and temporary loss of power or phone service. For that reason, these trucks must be limited to use in street collection routes. Future purchases of CNG trucks will be also limited by the ability to use them in street-only applications.

Further, the cost benefit of using CNG trucks assumes that at least 14 additional trucks will be purchased within the next three years, in order to avoid the expense to the city for any fueling station(s). That capital cost is amortized into the "per gallon" cost of the fuel by the fuel provider. Currently, purchase of up to 40 CNG trucks may be feasible without changes to alley collection service. Any additional units may require revisiting this topic.

Please let me know if you need additional information.

Ramon F. Miguez, P.E.
Assistant City Manager

C: Honorable Mayor and Members of the City Council
Mary K. Suhm, City Manager
Deborah A. Watkins, City Secretary
Thomas P. Perkins, Jr., City Attorney
Craig D. Kinton, City Auditor
Judge C. Victor Lander
Jeanne Chipperfield, Director, OFS
Helena Stevens-Thompson, Asst to the City Manager
Ryan S. Evans, First Assistant City Manager
A.C. Gonzalez, Assistant City Manager
Forest Turner, Interim Assistant City Manager
Dave K. Cook, Chief Financial Officer
Jill A. Jordan, P.E., Assistant City Manager
Mary Nix, Director, Sanitation Services

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