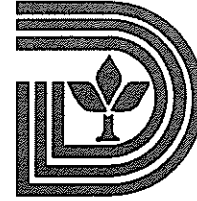


Memorandum



CITY OF DALLAS

DATE March 20, 2009

TO **Transportation and Environment Committee Members:**
Linda L. Koop (Chair) Sheffie Kadane (Vice Chair), Jerry R. Allen, Carolyn R. Davis,
Vonciel 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 (compressed 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.

OPTION	Qty	TOTAL Truck Purchase	FUEL COST over life of truck	FUEL STATION COST	TOTAL COST IMPACT
CNG TRUCKS	26	\$3,748,534	\$2,402,400	\$0 *	\$6,150,934
DIESEL TRUCKS	26	\$3,263,168	\$4,051,320	\$0	\$7,314,488

* ***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.

Ramón F. Míguez, P.E.
Assistant City Manager

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