

Amend the City of Dover Purchasing Policy by including the following new section:

SECTION 10 – GREEN PROCUREMENT

10.1 The City of Dover is committed to using and purchasing energy efficient/environmentally preferable products in the most cost effective and environmentally responsible manner possible. Purchasing energy efficient products reduces energy costs without compromising quality. Purchases should be based on:

- a) Consideration on the impact to the environment, economy, and human health and well-being.
- b) Consideration of specification compliance, delivery time and price.
- c) Preference given to environmentally preferable materials when they perform satisfactorily and can be obtained at a reasonable price.

10.2 The US Government in Executive Order 12873 defined environmentally preferable products as “products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose.” This should include items that are energy efficient, conserve water, reduces toxins, conserves natural resources, has recycled content and minimizes waste.

10.3 The Procurement Manager shall establish a price preference of up to ten percent (10%) for recycled and other environmentally preferable products. This price preference must be established in advance of any bid and must be included in the bid specifications, cover letter or evaluation criteria. This percentage may be modified from time to time at the discretion of the Procurement Manager with the objective of maximizing the City’s purchase of environmentally preferable products.

10.4 **LIFE CYCLE COST ANALYSIS**

The requesting department shall perform lifecycle costing analysis on equipment that has the potential to reduce operating, maintenance or energy costs over the useful life of the equipment. On the basis of said analysis, the contracting agency shall incorporate specifications in the contract for equipment that has the lowest total cost of ownership and operation over the useful life of the equipment. The use of lifecycle costing analysis may be waived by the department head, in writing, if the equipment is not appropriate for lifecycle costing analysis. Appendix E contains a sample form for life cycle cost analysis.

10.5 **ENERGY EFFICIENT PRODUCTS**

(a) The City shall purchase Energy Star products, as designated by the federal Environmental Protection Agency, when such products are available. The department may include non-Energy Star rated equipment as an alternate in the bid documents to enable lifecycle costing analysis to be performed as part of the analysis of responsive

bids. The department shall be required to award a contract that includes the procurement of Energy Star rated equipment unless they can demonstrate, in writing, to the satisfaction of the City Manager, that the interests of the city would be better served by procuring non-Energy Star rated equipment.

(b) Prior to initiating a request for procurement of any product, the department shall review the specifications for such product to determine whether an Energy Star product is available. If an Energy Star product is available, the department is required to include in its bid specifications the requirement that the product be an Energy Star product unless it can be demonstrated, in writing, to the satisfaction of the department head, that a product with an Energy Star rating meets at least 1 of the following criteria:

- (1) The product is not available competitively,
- (2) The product is not available within a reasonable time frame, or
- (3) The product does not meet appropriate performance standards.

APPENDIX E

Equipment Life Cycle Cost Bid Form:

Item	Est. Description	Unit Price	Total Price
No.	Qty.		
=====	=====	=====	=====
1.	Purchase Price Yr/Make/Model _____	\$ _____	\$ _____
2.	Trade In Price / Offer	\$ _____	\$ _____
3.	Total Maintenance Costs (From Scheduled Maintenance Calculation Form Attached)	\$ _____	\$ _____
4.	Maximum Repair Costs (Extended Warranty) (_____ Years / _____ Hours)	\$ _____	\$ _____
5.	Residual / Salvage Value (_____ Years / _____ Hours)	\$ _____	\$ _____
Total Bid Price (1 – 2 + 3 + 4 – 5)			\$ _____ =====

Scheduled Maintenance Calculation Form:

Instructions: The intent of this form is to determine the total scheduled maintenance costs that can be expected during the first _____ hours of ownership. Service intervals, number of grease fittings, and capacities should be taken directly from the manufacturer's lubrication and maintenance manual. Unit costs given are equal for all vendors. Although there may be a slight variance due to refill capacities, these total costs are made up of labor, overhead, lost production, gaskets, lubricants, filters, and supervisory time. The comparison examines the service intervals for the various units bid and assumes that the manufacturer's recommendations, if followed exactly, will allow the costs that are to be incurred on each unit, to be calculated with reasonable accuracy.

A. Grease Fittings: (Per one (1) unit)

Determine the number of fittings at each interval. Insert each number as indicated (if none, write none). Perform calculations and total in the last column.

Total Hrs. Operation	Service Interval	x	No. of Fittings	Cost Per Fitting	=Total Cost (A)
_____	÷	10	x	_____	x \$.25 = _____
_____	÷	50	x	_____	x \$.25 = _____
_____	÷	100	x	_____	x \$.25 = _____
_____	÷	250	x	_____	x \$.25 = _____
_____	÷	500	x	_____	x \$.25 = _____
_____	÷	1000	x	_____	x \$.25 = _____
_____	÷	2000	x	_____	x \$.25 = _____
TOTAL COST					= \$ _____

B. Engine Oil & Filter: From manufacturer's maintenance manual determine crankcase drain and refill interval. Insert this hourly number and perform the calculation to arrive at the total cost for an engine oil change.

Number of Gallons _____	x \$ 4.50 / Gallon	= \$ _____ +	
Current Cost of Filters		= \$ _____ +	
Fixed Cost (Time x Agencies Labor Cost / Hr)		= \$ _____ +	
Cost per Change		= \$ _____	
Total Hrs. Operation	Service Interval	Cost Per Change	= Total Cost (B)
_____	÷	_____ x	_____ = \$ _____

C. Hydraulic System: From the manufacturer's maintenance manual determine the hydraulic system's drain and refill interval. Insert this hourly number, insert the total capacity (in gallons) and perform the calculation to arrive at the total cost for a hydraulic system service.

Number of Gallons _____	x \$ 4.50 / Gallon	= \$ _____ +	
Current Cost of Filters		= \$ _____ +	
Fixed Cost (Time x Agencies Labor Cost / Hr)		= \$ _____ +	
Cost per Change		= \$ _____	
Total Hrs. Operation _____	Service Interval _____	Cost per Change _____	= Total Cost (C)
_____ ÷	_____ x	_____	= _____

D. Cooling System: From the manufacturer's maintenance manual determine the cooling system's drain and refill interval. Insert this hourly number, insert the total capacity (in gallons) and perform the calculation to arrive at the total cost for a cooling system service.

Total Hrs. Operation _____	Service Interval _____	Cooling System Cap _____	x Cost per Gal. = Total Cost (D)
_____ ÷	_____ x	_____ (Gal) x \$4.50	= _____

E. Hydraulic Hoses: From the manufacturer's maintenance manual determine the Hydraulic Hose replacement interval (If Not Required write None). Insert this hourly number, insert the labor cost and perform the calculation to arrive at the total cost for an engine vibration damper service.

Total Hrs. Operation _____	Service Interval _____	Labor & Parts Cost _____	= Total Cost (I)
_____ ÷	_____ x	_____	= _____

F. Other: From the manufacturer's maintenance manual include the cost of any other items that have a recommended service interval that falls within life of the contract.

Total Hrs. Operation _____	Service Interval _____	Cost per item _____	= Total Cost (E)
_____ ÷	_____ x	_____ (Gal) x \$4.50	= _____

TOTALS: (Per one (1) unit) Listed below are each of the categories just calculated. Insert the total number of each category in the space provided and add the column.

A. Grease Fittings \$ _____

B. Engine Oil and Filters \$ _____

C. Hydraulic System Changes \$ _____

D. Cooling System Changes \$ _____

E. Hydraulic Hose Replacement \$ _____

F. Other \$ _____

TOTAL SCHEDULED MAINTENANCE COSTS:

\$ _____