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Department of Energy Resources
Green Communities Division
100 Cambridge Street, 10th Floor
Boston, MA 02114
ATTN: Cliff Sullivan

Dear Mr. Sullivan,

As Mayor of the City of Gloucester, I have the authority to adopt and implement and hereby adopt the attached Fuel Efficient Vehicle Replacement Policy for the School Department as well as other City Facilities. I will instruct Facilities Manager to work with other Department Heads including the School Department to incorporate the recommendations outlined in the plan to the extent possible over the next five years.

We appreciate your assistance.

Sincerely,

Carolyn A. Kirk

Mayor

Attachment 4 Criteria 4 Fuel Efficient Vehicles

POLICY STATEMENT

As part of the City's overall goals of conserving natural resources, emphasizing the growing public health priority of reducing vehicular related air pollution, reducing the dependence on foreign oil, reducing greenhouse gas emissions, and promoting the use of clean technologies, it is the mission of the City of Gloucester and its Departments (including the School Department) to minimize their impact on the environment and enhance public health by establishing a Fuel Efficient Vehicle Policy. Under this policy, all City and School departments and divisions shall purchase Fuel Efficient Vehicles when they are commercially available and practicable and meet the operational needs of the City.

It is not the intent of this policy to require a Department to take any actions that conflict with local, state, or federal requirements or to procure products that do not perform adequately for their intended use, exclude adequate competition, or are not commercially available .

APPLICABILITY

This policy applies to all Divisions and Departments of the City of Gloucester and the Gloucester School District.

REPLACEMENT POLICY

Vehicle Inventory and Replacement

The City has developed and will maintain an inventory of all non exempt (see Exempt Vehicles below) City vehicles, including those vehicles for use by the School, Police and Fire Departments (see Table 1, Vehicle Inventory). Police and Fire Department administrative vehicles as well as all other vehicles including pick up trucks and vans must comply with this policy. This policy does not apply to other equipment such as backhoes, front-end loaders, sidewalks plows, lawn mowers etc.

All nonexempt vehicles will be replaced with fuel efficient vehicles that meet the fuel efficiency ratings outlined in this policy. Vehicles will be replaced when they are no longer operable.

Annual Review

This Fuel Efficient Vehicle Replacement Plan shall be incorporated into the City's annual operating budget process and will be reviewed by Department Heads (including the School Department and the Mayor's Office as vehicle replacement needs are identified. The Purchasing Department will ensure that the fuel efficient standards are included in the acquisition documents.

When replacing existing non exempt vehicles, all Divisions/Departments shall purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.

For the purpose of this Policy Fuel Efficient Vehicles are as defined by the U.S. Environmental Protection Agency as having combined City and highway miles per gallon no less than the following (as of April 1, 2010):

- 2 wheel drive car: 29 MPG
- 4 wheel drive car: 24 MPG
- 2 wheel drive small pick-up truck: 20 MPG

- 4 wheel drive small pick-up truck: 18 MPG
- 2 wheel drive standard pick-up truck: 17 MPG
- 4 wheel drive standard pick-up truck: 16 MPG

Alternate Fuel Vehicles

The use of alternate fuel vehicles will be considered whenever cost effective, operationally feasible, and when the use of such vehicles results in reduced energy use and emissions of pollutants and greenhouse gases.

EXEMPT VEHICLES

The following vehicles are exempt from this policy:

- Heavy duty vehicles such as fire trucks, ambulances and public works trucks over 8,500 pounds are exempt from this policy.
- Police cruisers are exempt from this policy until fuel-efficient cruisers become commercially available.

VEHICLE OPERATION

Anti Idling

In accordance with the Massachusetts Anti-Idling Law (MGL, Chapter 90, 16A), City vehicles shall not be left idling when parked, standing, or during warm-up for more than 5 minutes. No vehicle, City owned or otherwise, may idle in these areas. The Anti-Idling Law does not apply to:

- Vehicles being serviced, where operation of the engine is essential to the repair
- Vehicles engaged in the delivery or acceptance of goods, for which engine assisted power is necessary
- Vehicles engaged in an operation for which the engine power is necessary

Local authorities, including police, health officials, and parking enforcement staff will enforce the Anti-Idling Law, as allowed by MGL Ch90, Section 16A. The City will also incorporate anti-idling education into other public health and sustainability forums.

Reduce Vehicle Miles Traveled

The City will reinforce employee awareness of vehicle miles travelled during work hours as well as for commuting and will encourage alternate travel practices such as carpools, vanpools, bicycling, and walking.

Vehicle Maintenance

Preventative maintenance shall be performed as scheduled and on time to ensure optimal vehicle operation. Vehicles will be inspected regularly and prior to extended use to ensure correct tire pressure, oil and coolant levels, and to identify possible signs of other fluid leaks.

QUESTIONS / ENFORCEMENT

Questions regarding this policy should be directed to the department/division responsible for fleet management and/or fleet procurement. This policy is enforced by the Mayor of Gloucester and administered by the Operations Manager Public Services of the Department of Public Works and the Assistant Superintendent of Operations & Central Services of the School Department.

DEFINITIONS

COMBINED MPG - The fuel economy from driving a combination of 43% city and 57% highway miles and is calculated as follows:

$$=1/((0.43/City\ MPG)+(0.57/Highway\ MPG))$$

CONSERVATION - Steps taken to cause less energy to be used than would otherwise be the case. These steps may involve improved efficiency, avoidance of waste, reduced consumption, etc. They may involve monitoring fuel use, ensuring appropriate upkeep to improve efficiency, changing behavior patterns, etc.

DRIVE SYSTEM - The manner in which mechanical power is directly transmitted from the drive shaft to the wheels. The following codes are used in the drive field:

- AWD = All Wheel Drive: four-wheel drive automatically controlled by the vehicle power train system
- 4WD = 4-Wheel Drive: driver selectable four-wheel drive with 2-wheel drive option
- 2WD = 2-Wheel Drive

COST-EFFECTIVENESS - An indicator of the relative performance or economic attractiveness of an investment or practice when compared to the costs produced in the absence of such an investment. For vehicles, the present value of fuel savings from a specific vehicle as compared to the additional purchase price of the vehicle e.g., whether the estimated benefits exceed the estimated costs.

HEAVY-DUTY VEHICLE - A vehicle with a manufacturer's gross vehicle weight rating (GVWR) of more than 8,500 pounds.

LIFE CYCLE COST – Sum of all recurring and non-recurring costs over the life span or a specified period of a good or service. It includes purchase price, installation cost, operating costs, maintenance and upgrade costs, and remaining (residual or salvage) value at the end of ownership or its useful life.

Related Information

United States Environmental Protection Agency, Green Vehicle Guide

- <http://tiny.cc/greenEPA>

Massachusetts Department of Energy Resources, Green Communities Program

- Green Communities Criteria: <http://tiny.cc/criteria>
- List of Fuel Efficient Vehicles: <http://tiny.cc/vehicles>

Table 1
 Vehicle Inventory List (note vehicles highlighted in green are exempt)

Vehicle Function	Model	Make	Model Year	Year Purchased	Drive System	Weight Class	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
#100 - Chev SUV 4x4	SUV	Chevy	1996	1996	4WD	4,200			421.5	Mayor	G
#101 - Ford Explorer	Explorer	Ford	2008	2008		4,200	13-20	11041	849.3	DPW Director	G
#104 - Ford Taurus	Taurus	Ford	2000	2000		3,500	17-26	2021	118.9	City Transportation	G
#105 - Ford Taurus	Taurus	Ford	2000	2000		3,500	17-26	1916	112.7	Water/Sewer Ops Mgr	G
#110 - Chevy PU 1/4T	1/4T Pickup	Chevy	1998	1998		4,200			614.7	Public Serv. General Use	G
#111 - Chevy S10	S10	Chevy	1999	1999		4,200	15-21	7500	500.0	Public Serv. General Use	G
#112 - Ford PU	Pickup	Ford	2007	2007		4,200			453.0	Recycling coordinator	G
#114 - Ford Crown Vic	Crown Vic	Ford	2007	2007		3,800	17-25				G
#115 - Ford Crown Vic	Crown Vic	Ford	2006	2006		3,800	15-23				G
#120 - Ford F150	F150	Ford	2008	2008		6,500	14-19	2999	214.2	Storekeeper	G
#121 - MERD Ford F350 PU	F350	Ford	2010	2010		10,100					G
#125 - Ford PU	Pickup	Ford	1999	1999		8,600			310.5		G
#220 - Ford Utility 3/4T	3/4T Utility	Ford	1996	1996		8,600			1059.3	Sewer General Use	G
#225 - MERD Ford PU 3/4T, 4x4	3/4T Pickup	Ford	1997	1997	4WD	9,980			246.0	Sewer General Use	G
#230 - Ford Plat 1T, 4x4	1/4T	Ford	1997	1997	4WD	10,000			924.4	Sewer General Use	G
#314 - Chevy PU 1/4T	1/4T Pickup	Chevy	1995	1995		4,200			115.6		G
#320 - Ford Utility 3/4T	3/4T Utility	Ford	1997	1997		9,200					G
#324 - Chevy PU	Pickup (Model)	Chevy	2002	2002		9,000	19-25				G
#325 - Ford Van	Van (E150 Econoline)	Ford	2007	2007		3,600	14-19		491.3	Water Meter Readers	G
#326 - Ford Van	Van (E150 Econoline)	Ford	2007	2007		3,600			501.9	Water Meter Readers	G
#330 - Ford CC Util 1T	1T Utility	Ford	1997	1997		9,800			1114.0	Water General Use	G
#331 - Ford F350 PU	F350	Ford	2000	2000		10,000			1266.5	Water General Use	G

Vehicle	Model	Make	Year	Year Purchased	Drive System	Weight Class	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
#337 - Ford Dmp 1T, 4x4	1T Dump	Ford	1996	1996	4WD	10,000			880.3	Water General Use	G
#357 - Intl 7400	7400	International	2005	2005	4WD	42,000			680.6	Water General Use	G
#423 - Ford PU 3/4T, 4x4	3/4T Pickup	Ford	1997	1997	4WD	9,980			611.2	Public Serv. General Use	G
#425 - Ford PU 3/4T	3/4T Pickup	Ford	1995	1995	4WD	9,980			460.5	Public Serv. General Use	G
#433 - Ford F350 PU	F350	Ford	2006	2006	4WD	13,000			1565.5	Public Serv. General Use	G
#434 - Ford F350 PU	F350	Ford	2006	2006	4WD	13,000			1563.8	Public Serv. General Use	G
#435 - Ford F350 PU	F350	Ford	2006	2006	4WD	13,000			1468.2	Public Serv. General Use	G
#510 - Chevy PU 1/4T, EC	1/4T Pickup	Chevy	1997	1997		4,200			407.7	Public Serv. General Use	G
#521 - Ford F350 PU	F350	Ford	2010	2010		10,100				Pub Serv Work Foreman	G
#536 - Ford Util 1T	1T Utility	Ford	1995	1995		15,000			773.6		G
#612 - Ford PU 3/4T, 4x4	3/4T Pickup	Ford	1996	1996	4WD	8,600			618.0	Water Compliance	G
#621 - Ford F350 PU	F350	Ford	2010	2010		10,000			329.1		G
#633 - Ford F350 PU	F350	Ford	2008	2008	4WD	13,000			456.8	Public Serv. General Use	G
#700 - Ford F150	F150	Ford	2008	2008		6,500	14-20	7877	562.7	City Engineer	G
#701 - Ford F150	F150	Ford	2008	2008		6,500	14-20	5670	405.0	Public Services Ops Mgr	G
#702 - Ford F150	F150	Ford	2008	2008		6,500	14-20	7786	556.2	Engineering Inspector	G
#712 - Chev PU 4x4, EC	Pickup	Chevy	1996	1996	4WD	4,200			514.9	Pub Serv. General Use	G
#714 - Ford Ranger	Ranger	Ford	2007	2007	4X4	4,200	17-21	2210	130.0	Environmental Eng	G
#715 - Ford Ranger	Ranger	Ford	2007	2007	4X4	4,200	17-21	8317	489.2	Environmental Eng	G
#716 - Chev PU 1/4T, EC	1/4T Pickup	Chevy	1997	1997		4,200			641.5		G
#900 - Ford Crown Vic	Crown Vic	Ford	2001	2001		3,800	14-21	2671	190.8		G
#901 - Ford Sedan	Sedan	Ford	2005	2005		3,000			74.8		G
#902 - Ford Sedan	Sedan	Ford	1999	1999		3,800			69.1		G

Vehicle	Model	Make	Year	Year	Drive	Weight	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
#903 - Ford Sedan	Sedan	Ford	1996	1996		3,000			204.4		G
#904 - Ford Sedan	Focus	Ford	2007	2007		2,800	24-33	3463	144.3		G
#905 - Ford Focus	Focus	Ford	2002	2002		2,800	23-32				G
#906 - Ford Crown Vic	Crown Vic	Ford	2005	2005		3,800	14-20			Inspectional Services	G
#910 - Chev PU 1/4T	1/4T Pickup	Chevy	1995	1995		4,200			77.7		G
#915 - Chev PU 1/4T	1/4T Pickup	Chevy	1995	1995		4,200			116.2		G
#918 - Ford PU 1/2T	1/2T Pickup	Ford	1997	1997		6,000			777.9	Shellfish Warden	G
#919 - Honda Civic	Civic	Honda	2000	2000		2,800	24-32	2449	102.0	Community Development	G
#S48 - Chev 3500	F350	Ford	2002	2002		8,600			740.7	School General Use	G
#S50 - Ford Van E350	Van E350	Ford	1992	1992		9,000			414.6	School Electrician	G
#S53 - Ford PU 3/4T, 4x4	3/4T Pickup	Ford	1995	1995	4WD	9,980			439.5	School General Use	G
#S56 - Chev PU 3/4T, 4x4	3/4T Pickup	Chevy	1995	1995	4WD	9,000			999.9	School General Use	G
S512 - Chev PU 1/4T	1/4T Pickup	Chevy	1995	1995		4,200			106.5		G
F#801 - Ford 1997		Ford	1997	1997					502.4		G
F#802 - Ford 1998		Ford	1998	1998					377.5		G
F#809 - Ladder 1	Ladder 1								149.3	Fire Department	G
F#812 - Ford Expedition	Expedition	Ford							540.4	Fire Department	G
F#814 - Forestry 2									490.3	Fire Department	G
F#821 - Crown Vic	Crown Vic	Ford				3,800			252.1	Fire Department	G
HW170 - Ford Pickup	Pickup	Ford				9,800			611.1	Housing Authority	G
HW171 - Ford Pickup	Pickup	Ford				9,800			588.3	Housing Authority	G
HW172 - White Pickup			2000	2000		9,800				Housing Authority	G
HW173 - Chev Van	Van	Chevy				8,600			519.0	Housing Authority	G
HW174 - Dodge Pickup	Pickup	Dodge				4,200			385.1	Housing Authority	G

Vehicle	Model	Make	Year	Year Purchased	Drive System	Weight Class	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
H#175 - Ford F350	F350 Pickup	Ford				9,800			623.3	Housing Authority	G
H#176 - Ford Ranger	Ranger	Ford				4,200			412.1	Housing Authority	G
H#178 - Chevy Van	Van	Chevy				8,600			806.7	Housing Authority	G
H#179 - Chevy Van	Van	Chevy				8,600			287.2	Housing Authority	G
P#851 - Marked Cruiser 337C			2001	2001		3,800			4055.4	Police Department	G
P#852 - Silver Jimmy			2000	2000		4,200			384.3	Detectives	G
P#853 - Marked Cruiser 828G			2009	2009		3,800	16-24	24892	1555.7	Police Department	G
P#854 - Marked Cruiser 69E			2008	2008		3,800	15-23	66264	4417.6	Police Department	G
P#856 - Volvo		Volvo	1999	1999		3,800				Detectives	G
P#858 - Saturn		Saturn	1999	1999		3,000			182.2	Detectives	G
P#861 - Ford Explorer	Explorer	Ford				2,800			470.2	Police Department	G
P#864 - Unmarked Police 7480	Explorer	Ford	2010	2010		4,200	14-20	33173	2369.5	Police Department	G
P#866 - Marked Cruiser 57E			2009	2009		3,800	16-24	15575	973.5	Police Department	G
P#869 - Unmarked			2001	2001		3,800			509.1	Detectives	G
P#870 - Marked Cruiser 326C	Crown Vic	Ford	2005	2005		3,200	14-20			Police Department	G
P#871 - Marked Cruiser 3635	Truck				4WD	6,850			1515.3	Police Department	G
P#872 - Marked Cruiser 3696	Truck		2007	2007	4WD	6,850	15-21	16404	1093.6	Police Department	G
P#874 - Van	Van		2007	2007		3,800			726.1	Animal Control	G
P#875 - HarborMaster						8,600			464.6	HarborMaster	G
P#876 - Dodge Durango	Durango	Dodge	2000	2000		4,200	12-17	7194	599.5	Detectives	G
P#878 - Marked Cruiser 7699			2008	2008		3,800	15-23	72413	4827.6	Police Department	G
P#879 - Unmarked			2007	2007		3,800			567.7	Police Department	G
P#880 - Marked Cruiser 7738			2008	2008		3,800	15-23	63332	4222.1	Police Department	G

Vehicle	Model	Make	Year	Year Purchased	Drive System	Weight Class	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
P#898 - Unmarked (make/model?)						3,800			415.1	Police Department	G
#240 - Ford Dump	Dump	Ford	1999	1999	4X4	17,500			646.3	Sewer General Use	D
#244 - Int Util ST, CC	ST Utility	International	1997	1997		32,000			440.2	Sewer General Use	D
#250 - Ford Vactor 10T	10T Vactor	Ford	1997	1997		36,000			33.1	Sewer General Use	D
#251 - Intl Dump	Dump	International	1999	1999		36,000			698.0	Sewer General Use	D
#252 - Intl Tank	Tanker	International	2002	2002		42,000			975.0	Sewer General Use	D
#253 - Intl Vactor	Vactor	International	2005	2005	?	42,000			1989.1	Sewer General Use	D
#333 - Ford F450	F450	Ford	1999	1999	?	16,500			1361.8	Water General Use	D
#350 - Ford Dmp ST	ST Dump	Ford	1995	1995	4WD	26,000			85.3	Water General Use	D
#443 - Ford F450 PKR	F450 Packer	Ford	1999	1999		17,500			1059.3	Rubbish Removal	D
#550 - Chev Bkt Trk 10T	10T Bucket Truck	Chevy	1993	1993		26,000			223.3	Tree Work	D
#650 - Intl Dmp 10T	10T Dump	International	2001	2001		36,000			867.4	Public Serv. General Use	D
#651 - Intl Dmp 18T 4x4	18T Dump	International	1998	1998	6 x 4	62,000			862.2	Public Serv. General Use	D
#658 - Chev Dmp 10T	10T Dump	Chevy	1992	1992		36,000			1.5	Public Serv. General Use	D
#659 - Intl Dmp 10T	10T Dump	International	1998	1998		36,000			542.9	Public Serv. General Use	D
#666 - Int 700SER	700SER	International	2006	2006		42,000			1248.7	Public Serv. General Use	D
#681 - Navist Sweeper	Sander	Navist	2000	2000		29,000				Public Serv. General Use	D
#682 - Intl Sander	Sander	International	2000	2000		29,000			432.0	Public Serv. General Use	D
#683 - Elgin Sweeper	Sweeper	Elgin	2007	2007		29,000			706.3	Public Serv. General Use	D
F#803 - Engine 1	Engine 1								197.1	Fire Department	D
F#804 - Engine 2	Engine 2								16.0	Fire Department	D
F#805 - Engine 3	Engine 3								589.8	Fire Department	D
F#806 - Engine 4	Engine 4								2020.2	Fire Department	D
F#807 - Engine 5	Engine 5								205.2	Fire Department	D
F#808 - Engine 6	Engine 6								1791.6	Fire Department	D

Vehicle	Model	Make	Year	Purchased	Drive System	Weight Class	MPG	Annual Miles Driven	Total Fuel Consumption	Vehicle Function	Fuel
F#810 - Ladder 2	Ladder 2								616.4	Fire Department	D
F#811 - Rescue	Rescue								769.6	Fire Department	D
F#813 - Rescue 1	Rescue								1435.6	Fire Department	D
F#816 - Forestry 3	Forestry 3								20.7	Fire Department	D
F#817 - Rescue 3	Rescue 3								225.7	Fire Department	D
F#818 - Rescue 4	Rescue 4								1171.9	Fire Department	D
F#820 - New Ladder 1	New Ladder 1									Fire Department	D

Vehicle Fuel Use	No. Vehicles in Fleet	Annual Fuel Use (gal)	Annual Energy Use (MMBTU)
Gasoline	92	62781	7866
Deisel	28	21232	2947
Total	120	84013	10813

* Conversion Factor: 1 gal gasoline =125,300 BTU; 1 gal diesel = 138,800; 1 MMBTU=1,000,000 BTU