

TOWNSHIP OF HAMILTON

“Green Fleet’s Policy”

**Township of Hamilton
2090 Greenwood Avenue
Hamilton, New Jersey 08610
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TOWNSHIP OF HAMILTON – GREEN FLEET’S POLICY

Green Fleets Policy Background

The Township of Hamilton is adopting this Green Fleet’s Policy to facilitate a reduction in fuel usage and emissions that result from municipal operations. The objective of this policy is to reduce both energy use and emissions by incorporating practical decision making in the operation of the township’s fleet and through the purchasing of clean and energy efficient vehicles. Hamilton Township has been a leader in environmental stewardship in New Jersey. It received the coveted Green Town USA designation in 2006 and a Tree City USA designation in 2007. It owns and operates one of the finest Ecological Facilities in the state taking millions of dollars of products out of the waste stream by both reclamation and recycling. The Ecological Facility is a true reclamation center. Its function allows Hamilton to avoid over five (5) million dollars in land filling costs every year. Reclaimed products such as trees/brush and leaves, are converted into mulch and compost respectively and made available to township residents free of charge. Other items such as concrete, used motor oil, cardboard, metal, glass, car batteries, etc. are also taken and either recycled or reclaimed.

The township also implemented a Building Energy Conservation Plan. In compliance with the plan, the township has already replaced many incandescent light bulbs with compact florescent bulbs. The township has installed occupancy sensors in township building conference and rest rooms. When replacing HVAC systems, lighting, windows, roofs, etc., all high energy efficient systems are utilized.

The township will also be installing new underground fuel storage tanks this year (2007). These tanks will allow for the storage of E85 (85% ethanol, 15% gasoline). This will allow us to fuel our existing E85 capable vehicles as well as all new vehicles purchased that are E85 capable. E85 is a considered a much cleaner burning fuel than gasoline. The township already uses biodiesel for all of its diesel fueled vehicles.

I. BASIS FOR ORDINANCE

- (a) The total energy bill in 2003 for Municipal Government in the Township of Hamilton was \$2,803,897 and is projected to increase by about 10 percent per year to about \$5,000,000 by 2013. This forecast is based on a review of billing records from Public Service Electric and Gas from 2003 through 2006 and projecting the billing trend through 2013. The above noted costs include utility and fuel costs for all of the municipal government buildings and vehicles. It does not presently include township schools.
- (b) Departments in the Township of Hamilton operate vehicle fleets that account for about 22 percent of the Township's total energy bill in 2006. In 2003, the vehicle fleets accounted for about 12% of the total energy bill.
- (c) The Township of Hamilton recognizes that energy use associated with the operation of its motor vehicle fleets exacerbates local air quality problems and results in greenhouse gas emissions that contribute to global climate change.
- (d) The Township of Hamilton recognizes that its departments have a significant role to play in improving local air quality and reducing greenhouse gas emissions by improving the energy efficiency of its fleets and reducing emissions from fleet operations.
- (e) The Township of Hamilton recognizes that, by improving the energy efficiency of its fleet, significant monetary savings will result in the long term.
- (f) The Township of Hamilton wishes to exercise its power as a participant in the marketplace to ensure that purchases and expenditures of public monies are made in a manner consistent with the policy of improving local air quality and reducing greenhouse gas emissions.
- (g) The Township of Hamilton wishes to establish a "Green Fleets" policy addressing the management, operation, and procurement of fleet vehicles under the control of the Township of Hamilton in order to improve the energy efficiency of its fleets and reduce emissions from its fleets.

II. DEFINITIONS

- (a) "Passenger Vehicle" means any motor vehicle designed primarily for the transportation of persons and having a design capacity of twelve persons or less.
- (b) "Light Duty Truck" means any motor vehicle, with a manufacturer's gross vehicle weight rating of 6,000 pounds or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.
- (c) "Medium Duty Vehicle" means any vehicle having a manufacturer's gross vehicle weight rating of 14,000 pounds or less and which is not a light-duty truck or passenger vehicle.
- (d) "Heavy Duty Vehicle" means any motor vehicle, licensed for use on roadways, having a manufacturer's gross vehicle weight rating greater than 14,000 pounds.
- (e) "Zero-Emission Vehicle" means any motor vehicle that produces zero exhaust emissions of all criteria pollutants, as defined by 17 California Code of Regulations §90701(b), (or precursors thereof) under any and all possible operational modes and conditions or any vehicle that has been certified by the California Air Resources Board as a zero-emission vehicle.
- (f) "Super Ultra-Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 13 California Code of Regulations § 1960.1 for Super Ultra-Low Emission Vehicles (SULEV).
- (g) "Ultra-Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 13 California Code of Regulations § 1960.1 for Ultra-Low Emission Vehicles (ULEV).
- (h) "Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 13 California Code of Regulations § 1960.1 for Low Emission Vehicles (LEV).
- (I) "Electric Drive train Vehicle" means any vehicle that employs an electric drive train and motor as its primary means of motive force. The vehicle can be powered by fuel cells, electric batteries, petroleum- or alternatively-fueled electric generators, or any combination thereof.

- (j) "Alternative Fuel" means any fuel that is substantially non-petroleum in nature, is not gasoline or diesel, and is defined as an alternative fuel by the U.S. Department of Energy through the authority granted it by the Energy Policy Act of 1992.
- (k) "Bi-Fuel Vehicle" means any motor vehicle designed to operate on two (2) fuels, one of which is an alternative fuel, but not on a mixture of fuels.
- (l) "Flex-Fuel Vehicle" means any motor vehicle that is designed to operate on a mixture of fuels. For example, an E85 vehicle can run on up to 85% ethanol and 15% gasoline or any combination of the fuels including 100% gasoline.

III. FLEET INVENTORY

- (a) In order to establish a baseline of data, so that the "Green Fleets" policy can be established, implemented, and monitored by the designated Township Fleet Manager (Public Works) and the Green Fleets Review Committee, an inventory and analysis of the fleet vehicles within that department or agency as of the close of fiscal year 2003 shall be conducted and documented. This inventory shall include:
 - 1) Number of vehicles classified by the model year, make, model, engine size, vehicle identification number (VIN), and drive train type (2-wheel drive or 4-wheel drive), and the rated vehicle weight and classification (light-duty, medium-duty, heavy-duty);
 - 2) Miles per gallon (or gallon equivalent) per vehicle;
 - 3) Type of fuel (or power source, e.g., electricity) used;
 - 4) Average cost per gallon (or gallon equivalent) of fuel;
 - 5) Average fuel cost per mile;
 - 6) Annual miles driven per vehicle;
 - 7) Total fuel (or power) consumption per vehicle;
 - 8) Vehicle function (i.e., the tasks associated with the vehicle's use);
 - 9) Estimated emissions per mile for each pollutant by vehicle type/class based on EPA tailpipe standards for the following: Carbon Monoxide (CO), Nitrogen Oxides (NOX), and Particulate Matter (PM).
 - 10) Carbon Dioxide (CO₂) calculations based on gallons (or gallon equivalent) of fuel consumed.
- (b) The Fleet Manager from township's Department of Public Works shall be responsible for providing this baseline data in a reliable and verifiable manner.

The data will be submitted to the "Green Fleets" Committee established in Section VI for use in measuring progress toward the goals outlined in Section IV below.

IV. THE "GREEN FLEETS" POLICY

- (a) It shall be the policy of the Township of Hamilton to purchase, lease, or otherwise obtain the most energy efficient vehicles possible that meet the operational needs of the department or agency for which the vehicles are intended.
- (b) It shall be the policy of the Township of Hamilton to manage and operate its fleets in a manner that is energy efficient and minimizes emissions.
- (c) The Township of Hamilton shall decrease energy expenditures for its vehicle fleets by a total of 20 percent by the year 2013, adjusted for inflation and relative to the baseline data established for year 2003 through the fleet inventory taken in compliance with Section III above. This goal is based on the township's commitment to purchase energy efficient vehicles and is attainable based on past purchasing practices.
- (d) The Township of Hamilton shall reduce the emission of green house gases from its fleet by a total of 25 percent by the year 2013, relative to the baseline data established for year 2003 in the fleet inventory taken in compliance with Section III above. This number is attainable based on the township's commitment to using more energy efficient vehicles, utilizing clean fuel technology vehicles, and accomplishments already realized.

V. "GREEN FLEETS" POLICY STRATEGIES

- (a) In order to accomplish the goals stated in Section IV above, the Township of Hamilton shall modify procurement procedures, implement policies, conduct reviews, and take other actions as outlined in sub-sections (b) through (n) below.
- (b) Include a minimum efficiency standard in miles per gallon (or gallon equivalent) for each vehicle class for which the Township has a procurement

specification for and include such a standard in any new vehicle procurement specification.

- (c) Include a minimum emissions standard for each vehicle class for which the Township has a procurement specification for and include such a standard in any new vehicle procurement specifications. This emission standard shall be based on the California Air Resources Board (CARB) designations of LEV, ULEV, SULEV, and ZEV.
- (d) Ensure that a minimum of 75 percent of the passenger vehicles purchased, leased, or otherwise obtained within a fiscal year by the Township of Hamilton are low, ultra low or zero-emission vehicles. Zero-emission vehicles purchased, leased, or otherwise obtained, that qualifies in another vehicle weight class may, for the purposes of this requirement, qualify as a passenger vehicle ZEV on a one vehicle for one vehicle basis.
- (e) Review all vehicle procurement specifications and modify them as necessary to ensure that the specifications are written in a manner flexible enough to allow the purchase or lease of alternatively fueled or electric drive train vehicles.
- (f) Review every new vehicle purchase request and modify them as necessary to ensure that the vehicle class to which the requesting vehicle belongs is appropriate for the duty requirements that the vehicle will be called upon to perform.
- (g) Review the fleet inventory taken in Section III above to identify older vehicles that are used infrequently (or not at all), as well as those vehicles that are disproportionately inefficient, and schedule their elimination or replacement.
- (h) Implement an anti-idling policy prohibiting Township employees from idling Township-owned or operated vehicles for an excessive period of time. This has been accomplished and is attached to this document as appendix A.
- (I) Implement an incentive program for Township employees to drive efficiently and utilize efficient vehicle operating techniques.
- (j) Prohibit the use of non-alternative fuels in bi-fuel vehicles for more than 10 percent of the time that they are operated within the Township.
- (k) Maintain vehicles at optimal efficiency by reviewing current maintenance schedule for all fleet vehicles and increasing maintenance wherever cost-effective benefits will accrue as a result.

- (l) Township employees are to be advised to utilize route optimization computer software (e.g., MapQuest) when planning a driving route to various locations. This should assure that the shortest and most efficient route(s) is taken.
- (m) Each Department shall designate an employee to act as the Department's Fleet Manager.

VI. MONITORING OF THE "GREEN FLEETS" POLICY

- (a) In order to ensure compliance with the goals outlined in Section IV above, as well as to monitor the actions outlined in Section V above, a "Green Fleets" Review Committee is to be formed. The Office of the Mayor, or his designee, will appoint the members of this review committee using any combination of representatives from each of the following Departments and/or Agencies:
 - 1) Office of the Mayor
 - 2) Department of Public Works
 - 3) Department of Engineering, Planning and Inspections
 - 4) Department of Health and Senior Services
 - 5) Police Department
 - 6) Department of Water Pollution Control
 - 7) Hamilton Township Environmental Commission
 - 8) Township Business Administrator
- (b) On an annual basis, Departmental Fleet Managers shall submit a draft "Green Fleets" plan to the Green Fleets Review Committee detailing how vehicle procurement, fleet operations, and employee travel activity are intended to conform to the "Green Fleets" policy and the "Green Fleets" strategies outlined in Section V. This can easily be accomplished as part of the annual budget process involving Capital expenditures for equipment. The "Green Fleets" plan will also include, as an appendix or addendum, an updated fleet vehicle inventory list in the same format as the fleet vehicle inventory completed in Section III.
- (c) Each "Green Fleets" plan shall be reviewed by the Review Committee for overall conformity with the "Green Fleets" policy and for completeness in addressing the "Green Fleets" strategies outlined in Section V. Inadequate plans shall be returned to the submitting Department or Agency for revisal and discussion with the Review Committee.

- (d) Any appeal of the Review Committee's decisions must be made in writing to the Committee accompanied by appropriate documentation. Valid reasons for an appeal include unavailability of appropriate fleet vehicles, incremental costs in excess of the full life-cycle savings that would accrue from the acquisition of a given vehicle and the primacy of a given vehicle's mission to public safety or a similar area judged to be applicable by the Review Committee.
- (e) Approval of vehicle procurement requests for each Department is contingent upon a satisfactory recommendation from the "Green Fleets" committee as to the merit of the Departments or Agency's "Green Fleets" plan.
- (f) The most innovative "Green Fleets" plan implemented shall receive recognition in an annual award to the Department submitting the winning plan. The "Green Fleets" review committee shall determine the recipient of the award during the annual "Green Fleets" plan review process.

(The construction of this model is inspired by fleet policies or initiatives in Denver, CO, San Francisco, CA, Sacramento, CA, Fort Collins, CO, Santa Monica, CA, and Miami-Dade County, FL.)