LAKE COUNTY FOREST PRESERVE DISTRICT
GREEN FLEET POLICY

Revised November 2009

Policy Purpose

This policy is part of the District's efforts to meet ambient air quality standards, reduce the fleet's petroleum use and impact on the environment, and control fleet costs. It is the intent of this policy to 1) procure and maintain the necessary vehicles and equipment to allow employees to perform their job functions, in an economically responsible manner; 2) operate vehicles and equipment economically and with safety to employees and to the public; 3) reduce greenhouse gas emissions by improving the energy efficiency of its fleet; and 4) manage the fleet in a manner that will require the least amount of expansion, and where possible, to reduce the number of vehicles and pieces of equipment operated by the District.

With age and new technology certain existing vehicles and equipment may become obsolete with regard to newer vehicles and equipment that provide improved productivity and economy it is desirable to replace all gasoline and diesel-powered vehicles with alternative fuel/technology powered vehicles and to purchase only alternative fuel/technology powered vehicles when available. With age the frequency of breakdowns generally accelerates leading to reduced productivity due to vehicle and equipment unavailability, as well as increased cost to repair and maintain.

This policy applies to the purchase and lease of all licensed over the road vehicles and equipment---light-duty Alternative Fuel, Gasoline, Hybrid-Electric and all Sport Utility and Four-Wheel Drive vehicles; and light, medium and heavy duty trucks.

SECTION 1 INTRODUCTION

1. The District actively seeks ways in which to conserve energy resources and substantially reduce emissions that adversely impact global climate change, including investigation, cost-benefit analysis, and application of alternative and renewable energy technologies.

2. The District recognizes that energy use associated with the operation of its motor vehicle fleet affects local air quality and results in greenhouse gas emissions.

3. The District recognizes that it has a role to play in improving local air quality and reducing greenhouse gas emissions by improving the energy efficiency of its fleet and reducing emissions from fleet operations.

4. The District recognizes that by improving the energy efficiency of its fleet, it will be reducing emissions, improving local air quality, and it is expected that monetary savings will result in the long term.

5. The District desires to ensure that purchases and the expenditure of public funds are made in a manner consistent with the policy of improving local air quality and reducing greenhouse gas emissions.

6. The District desires to establish a "Green Fleet" policy addressing the management, operation and procurement of fleet vehicles in order to improve the energy efficiency of its fleet and reduce emissions from its fleet.

SECTION 2 DEFINITIONS

1. "Passenger Vehicle" means any motor vehicle designed primarily for the transportation of persons and having a design capacity of seven (7) persons or less. This category includes sedans, minivans, passenger vans and small pick-up trucks. Minimally acceptable mileage: 16 mpg city/20 mpg highway. Must also meet or exceed LEV standard.

2. "Light Duty Truck" means any motor vehicle licensed for use on roadways with a manufacturer's gross vehicle weight rating of 6,000 pounds or less, and 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. Minimally acceptable mileage: 15 mpg city/18 mpg highway. Must also meet or exceed LEV standard.

3. "Medium Duty Vehicle" means any motor vehicle licensed for use on roadways with a manufacturer's gross vehicle weight rating of 14,000 pounds or less, and which is not a light-duty truck or passenger vehicle. Minimally acceptable mileage: 12 mpg city/15 mpg highway. Must also meet or exceed LEV standard.

4. "Heavy Duty Vehicle" means any motor vehicle licensed for use on roadways with a manufacturer's gross vehicle weight rating greater than 14,000 pounds.

5. "Zero-Emission Vehicle" means (i) any motor vehicle that produces zero exhaust emissions of all criteria pollutants, as defined by 35 Illinois Administrative Code §241.104 under any and all possible operational modes and conditions, or (ii) any vehicle that has been certified as a Zero-Emission Vehicle (ZEV).

6. "Inherently Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 35 Illinois Administrative Code §241.104 for Inherently Low Emission Vehicles (ILEV).

7. "Ultra Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 35 Illinois Administrative Code §241.104 for Ultra Low Emission Vehicles (ULEV).

8. "Low Emission Vehicle" means any motor vehicle that meets or exceeds the standards set forth in 35 Illinois Administrative Code §241.104 for Low Emission Vehicles (LEV).

9. "Electric Drivetrain Vehicle" means any vehicle that employs an electric drivetrain 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.

10. "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 by the Energy Policy Act of 1992.

11. "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.

12. "Life Cycle Cost Analysis" means the analysis for replacement of vehicles and equipment based on mileage/hours, age, condition, repair and maintenance cost, reliability, and auction value, as well as energy efficiency and productivity improvement.

SECTION 3 FLEET INVENTORIES

1. In order to establish a baseline of data so that the "Green Fleet" policy can be established, implemented and monitored, the designated fleet manager shall develop an inventory and analysis of the fleet vehicles. This inventory shall include:
    a. Number of vehicles classified by the model year, make, model, engine size, vehicle identification number (VIN), and drivetrain type (2-wheel drive, 4-wheel drive), and the rated vehicle weight and classification (light-duty, medium-duty, heavy-duty)
    b. Miles per gallon (or gallon equivalent) per vehicle
    c. Type of fuel (or power source, e.g., electricity) used
    d. Average cost per gallon (or gallon equivalent) of fuel
    e. Average fuel cost per mile
    f. Annual miles driven per vehicle
    g. Total fuel (or power) consumption per vehicle
    h. Vehicle function (i.e. the tasks associated with the vehicle's use)
    i. Estimated emissions per mile for each pollutant by vehicle type/class based on the federal table of EPA tailpipe standards for the following: Carbon Monoxide (CO), Nitrogen Oxides (NOx), and Particulate Matter (PM)
    j. Estimated emissions of Carbon Dioxide (CO_2) based on gallons (or gallon equivalent) of fuel consumed using the federal EPA table for each type of fuel.

SECTION 4 GREEN FLEET POLICIES

1. It shall be the policy of the District to seek and implement ways to conserve energy resources and substantially reduce emissions that adversely impact global climate change, including investigation, cost-benefit analysis, and application of alternative and renewable energy technologies.

2. It shall be the policy of the District to purchase the most energy efficient vehicles possible that meet the operational needs for which the vehicles are intended.

3. It shall be the policy of the District to manage and operate its fleet in a manner that is energy efficient and minimizes emissions.

4. It shall be the policy of the District that replacement vehicles shall be alternative fuel/technology powered when possible and practical. Replacement equipment shall be alternative fuel/technology powered when possible and practical. The vehicle type and size will be determined by the intended use with primary considerations given to economy, utility, capacity, safety and the environment. The District's fleet and equipment shall be standardized, when possible, to keep maintenance costs lower and to be able to stock fewer parts.

5. When purchasing gasoline-powered vehicles, flexible fuel or fuel efficient hybrid vehicles will be considered when available For this purpose, "flexible fuel vehicles" are automobiles or light trucks that operate on either gasoline or E-85 (85% ethanol, 15% gasoline) fuel and "fuel efficient hybrid vehicles" are automobiles or light trucks that use a gasoline or diesel engine and an electric motor to provide power and gain at least a 20% increase in combined US-EPA city-highway fuel economy over the equivalent or similar gas only conventionally powered model. When evaluating potential use of "flexible fuel vehicles", the energy, emissions, water use and other environmental impacts used to produce the ethanol will be considered.

6. All diesel-powered vehicles purchased must be bio-diesel fuel vehicles**, when available,** and be certified by the manufacturer to run on 20% bio-diesel (B20) fuel. When evaluating potential use of bio-diesel fuel, the energy, emissions, water use and other environmental impacts used to produce the bio-diesel fuel will be considered.

7. A Life Cycle Cost Analysis shall be completed for all vehicles purchased or considered for purchase. This Life Cycle Cost Analysis will be considered in recommending the purchase of alternate fuel and hybrid vehicles. (See Section 2.12)

8. The District shall monitor and measure the cost of energy expenditures for the vehicle fleet, adjusting for inflation and relative to the baseline data established for year 2007 in the fleet inventory taken in Section 3 above.

9. The District shall monitor and measure the emission of carbon dioxide (CO_2) from its vehicle fleet relative to the baseline data established for year 2007 in the fleet inventory taken in Section 3 above.

Fuels and vehicles that satisfy policy requirements. The **Clean Air Act** defines a clean fuel as any power source on which a vehicle is certified to meet federal Clean Fuel Vehicle (CFV) emissions standards. Clean fuels include alternative fuels, oxygenated fuels, reformulated gasoline (RFG) and conventional gasoline. A CFV is a vehicle that is certified to Low Emission Vehicle (LEV) standards or better, and operates on the fuel to which the vehicle was certified as a LEV.

Sport Utility and Four-Wheel Drive Vehicles. In order to discourage the purchase or lease of SUV's and four-wheel drive trucks, each department seeking to purchase or lease either SUV's or four-wheel drive trucks must demonstrate to the satisfaction of the Executive Director that the vehicle is required to perform an essential function. If it is so demonstrated, priority consideration shall be given to the purchase of an alternative fuel or hybrid sports utility vehicle or four-wheel drive vehicle.

Vehicles exempt from policy requirements. Law enforcement and emergency vehicles are exempt from the policy requirements. The Executive Director may determine that certain vehicle procurements are exempt from this Policy based on intended use or other reasonable considerations such as health and safety of Illinois citizens.

SECTION 5 GREEN FLEET POLICY STRATEGIES

1. In order to accomplish the goals stated in Section 4 above, the District shall modify procurement procedures, implement policies, conduct reviews, and take other actions as outlined in sub-sections (2) through (9) below.

2. Annually review the vehicle and equipment replacement schedules, along with any requests for additions to the fleet, in an attempt to reduce the number of fleet units operated by the District to the lowest level required to meet operational demands.

3. Annually rotate vehicles within the fleet in order to achieve the most efficient use of District resources and to maximize each vehicle's value at time of auction.

4. Include a minimum efficiency standard in miles per gallon for each vehicle class for which the District has a procurement specification and include such a standard in any vehicle procurement specification.

5. Include a minimum emissions standard for each vehicle class for which the District has a procurement specification and include such a standard in any vehicle procurement specifications. This emission standard shall be based on Illinois EPA designations of LEV, ILEV, ULEV, and ZEV.

6. 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 of alternatively fueled or electric drivetrain vehicles.

7. Review every vehicle purchase request to ensure that the vehicle class to which the requesting vehicle belongs is appropriate for the duty requirements that the vehicle is intended to perform.

8. Review the fleet inventory taken in Section 3 above to identify older vehicles that are disproportionately inefficient and schedule their replacement.

SECTION 6 MONITORING OF THE GREEN FLEET POLICY

1. A Green Fleet Review Committee shall be appointed in order to ensure compliance with the goals outlined in Section 4 and to monitor the policy strategies outlined in Section 5. The Executive Director shall appoint the members to this committee, with one representative from each of these Departments: Administration, Finance, and Operations and Public Safety. The Director of Operations and Public Safety will be responsible for oversight of the vehicle fleet.

2. On an annual basis a Green Fleet Report, detailing how vehicle procurement, fleet operations, and employee travel activity are intended to conform to the Green Fleet Policy and the Green Fleet Strategies outlined in Section 5, will be presented to the Finance, Administrative and Revenue Committee. The report shall also include an updated fleet vehicle inventory list.

3. The fleet manager shall 1) maintain accurate computerized records on purchasing, maintenance costs, parts costs, accidental costs, fuel costs, labor costs and warranty reimbursements, for analysis and management reports; 2) inspect and repair fleet vehicles to ensure they are safe to operate, functional and economical for their intended use; and 3) recommend the replacement and disposition of vehicles and equipment as deemed necessary.

SECTION 7 AIR POLLUTION ACTION DAYS

1. On days designated by the State of Illinois as an Air Pollution Action Day, the Director of Operations and Public Safety will notify the Executive Director and all Department Directors of this designation.

2. Once notified, the Department Directors will be responsible for limiting the driving of District employees to trips that are deemed to be of critical operational importance.

3. Fueling of vehicles on designated days will be avoided if practical.

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