

GREEN FLEET POLICY

Purpose: The purpose of this policy is to facilitate the County's commitment to significantly reduce emissions from the County's diverse fleet of vehicles and equipment, which includes sedans, light trucks, medium and heavy trucks and heavy equipment. Our goal is to reduce greenhouse gases and other toxic vehicle and equipment exhaust emissions in a sustainable manner.

Policy Statement: The County of Sonoma is committed to operating a vehicle and equipment fleet program that is environmentally and economically sustainable, and is designed, constructed, and operated in a manner to use resources efficiently and minimize waste. The County will remain committed to managing and conserving natural resources in an equitable manner for present and future generations of residents receiving County services.

- a) The County will establish a centralized fleet management model to ensure that vehicle and equipment assets are purchased, maintained, fueled, operated and disposed of in the most efficient methods that are consistent with the policy statement.
- b) The County will establish a Green Fleet Team which includes active representation from the County Administrator's Office, General Services Fleet Operations and Purchasing Divisions, and from selected departments that will oversee the Green Fleet programs and initiatives.
- c) This policy establishes seven Operational Project Areas (OPA) that need to be managed and controlled in order to achieve the greatest reductions in the County's fleet operations environmental hazards at the lowest cost while ensuring that the County can perform its mission in the best and most efficient manner. These OPA's are:
 - County Fleet Management and Operations Policy
 - Vehicle/Equipment Management
 - Vehicle/Equipment Purchasing
 - Fleet Maintenance and Fuel Facilities
 - Fleet Support Infrastructure
 - Driver Awareness and behavior
 - Cost Control

Goals and Objectives:

- Reduce GHG emissions from the County's fleet operations 20% by 2010, based on the year 2000 baseline.

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- Continue to reduce or minimize GHG and other emissions from the County's fleet operations using a best practices approach in an effort to comply with future County, State or Federal mandates.
- Reduce the County's diesel exhaust particulate matter 85% by the year 2015
- Reduce consumption of fossil fuels in County vehicles and equipment using new technologies and alternate fuels.
- Operate the County's fleet maintenance and fuel facilities with an emphasis on reducing GHG emissions and other environmental hazards.

Attachment A. Implementation Plan

IMPLEMENTATION PLAN AND PROCEDURES FOR THE COUNTY GREEN FLEET POLICY

Implementation of this policy shall be based on the following the Operational Project Areas (OPA) designated in the Green Fleet Policy. In each OPA, the County will use Best Fleet Management Practices for vehicles and equipment as guidelines to implement and manage that area. Integration of these practices within the project areas will provide the ability to determine how many vehicles are needed, the best vehicle for the job, the flexibility to increase and decrease the size of the fleet based on each department's changing needs, reassign vehicles to other departments as needs change, and ensure that vehicles are utilized in the most appropriate manner.

Green Fleet Team: The County will establish a Green Fleet Team which includes active representation from the County Administrators Office, General Services Fleet Operations and Purchasing Divisions, and from selected departments that will oversee the Green Fleet programs and initiatives. The team shall meet at least annually and be presented information about the progress in greening the fleet, problems or roadblocks, and given an annual report on reductions against the targets. The Green Fleet Team will help set priorities and give direction to the Fleet Operations Division on future initiatives.

Vehicle and Equipment Management: Vehicles and equipment shall be managed in a manner that provides the County with the best use of each unit. The management process begins with an assessment of the need and goes through the final disposal of the unit. Best practices to be used are:

Centralized Fleet Management - Management of fleet assets and long term planning for replacement, assignment and vehicle/equipment selection should be centralized under a fleet management agency that is staffed by specialized fleet professionals.

Optimize Fleet Size – “Right Size” the County Fleet by eliminating extra vehicles and equipment and establishing a review process for adding vehicles to the Fleet.

Vehicle/Equipment Minimum Utilization Standards – Benchmark and facilitate vehicle utilization and establish a minimum usage standard for vehicles and equipment. Provide for a utilization exception process with distinct exemption criteria.

Fleet Reassignment – Develop a program to increase vehicle utilization while safeguarding vehicle availability in a manner that validates the need for scheduled replacements.

The County Fleet is a tool that is required for departments and agencies to perform their daily functions in the most efficient manner. To best accomplish this task, the County shall develop a centralized fleet management model and place the responsibility for the management of fleet assets under the review of the General Services Department, Fleet Operations Division. Fleet Operations shall work with each department to ensure that

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vehicles and equipment meet the requirements of the assignment and the appropriate vehicles/equipment shall be available.

The County fleet shall be evaluated regularly to make sure that departments have the correct number of vehicles assigned and that those vehicles are appropriate for the function and/or service they help provide. If a department needs additional vehicles for a program improvement or change, Fleet Operations will work with the department to meet that need. If a department has more vehicles than are needed, extra vehicles should be turned in to Fleet Operations. To best evaluate when additional vehicles are needed or when vehicles become excess, a minimum standard shall be set.

Usage Standards for Permanent Assignment of County Vehicles or Equipment:

Sedans, light trucks and vans: More than 500 miles per month or 3 days per week over a period of not less than six (6) months.

Medium and heavy duty trucks: 400 miles per month for a period of not less than 6 months

Off-road heavy equipment: 150 hours per year.

Seasonal equipment may be considered specialized and will only be counted during the months it is used regularly.

These minimum usage standards are for evaluation purposes only. When vehicle/equipment usage drops below this standard, they will be evaluated to see if an assigned unit is the best method to provide the need. If other methods are determined to be more efficient and/or cost effective and still provide the required level of service to the public, the vehicle/equipment shall be turned in to Fleet Operations for reassignment to be used as replacements elsewhere in the fleet or sold at auction.

Vehicle/Equipment Purchasing: New vehicle procurement shall include the following steps regardless of the funding source of the vehicle or equipment. Best Practices to be used are:

Optimize Fleet Size – Right size the County Fleet by eliminating extra vehicles and establishing a review process for adding vehicles to the Fleet.

Vehicle/Equipment Minimum Utilization Standards – Benchmark and facilitate vehicle utilization and establish a minimum usage standard for vehicles and equipment. Provide for a utilization exception process with distinct exemption criteria.

Reduce Vehicle Size – Evaluate replacement vehicles with the appropriate department personnel to define the appropriate vehicle size and usage. Replace these vehicles with smaller, more fuel efficient vehicles when possible and practical.

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Vehicle and equipment purchasing requires four steps.

- Needs and Specification Assessment
- Identification of Funding Source
- Bidding and Acquisition
- Delivery, Set up and Assignment.

Needs and Specification Assessment: When program demands require additional vehicle assets, Fleet Operations will be contacted by the department. Fleet Operations and the department will work together to determine the need, estimate the usage in miles driven and days per week used, determine the type of vehicle that best fits the application, identify any special needs or equipment, and establish when the vehicle will be required.

From this assessment, Fleet Operations will project the costs and rates for acquiring, maintaining and replacing the vehicle, and the best supply option available for providing a vehicle based on the intended use. The options include:

1. Using a pool vehicle from the Fleet Operations Motor Pool
2. Sharing a vehicle assignment with another department or division that is co-located
3. Re-assigning a Fleet Pool vehicle as a department assigned vehicle
4. Procuring and adding a vehicle to the fleet and assigning it to the department

Identify Funding Source: After the need for an additional vehicle has been established, Fleet will determine the best method of acquiring the vehicle. Choices include direct purchase from the Fleet Accumulated Capital Outlay (ACO) Fund, municipal lease agreement, short term lease, outside grants, or rental from an outside provider.

Bidding and Acquisition: If it is determined that acquiring an additional vehicle is the best option, the department would obtain a recommendation from Fleet Operations and make it part of the Program Improvement submittal to the CAO. If approval is obtained, an appropriation would be requested from the designated funding source and Fleet Operations would be directed to submit the bid requisition to Purchasing. Fleet will be responsible for monitoring the bid process, responding to questions from bidders, evaluation of the final bids and recommendation for the award of the bid. Fleet will keep the department apprized as to the status of the bid.

Delivery, set up and Assignment: Delivery will be to the appropriate Fleet facility. When the vehicle arrives it will be set up according to the requirements of the usage specification. Some of the setup costs for extra equipment not included in the rates may be charged directly to the department at this time. When the vehicle is ready to go into service it will be assigned to the department and monthly rates will be charged to recover the purchase price and operating costs of the vehicle.

Fleet Maintenance and Fuel Facilities:

Maintenance Facilities - Practices and procedures for daily operations and processes for the maintenance facilities to ensure that Green Processes are followed.

PM Compliance – Compliance with preventive maintenance schedules. Explore methods that will reduce waste generated during normal preventive maintenance.

Technician training – Expand training requirements for technicians that include latest technology in reducing emissions.

Technician credential requirements (ASE)

Specialization among Technicians

Driver Awareness and Behavior

Slow Down Sonoma County

The actions and behavior of the vehicle driver can have a dramatic impact on vehicle mileage and maintenance cost. By following a few simple “Rules of Driving” drivers can reduce fuel consumption by as much as 15% to 20%. In most vehicles in the fleet this equates to 1-½ to 3 miles per gallon. Increasing fuel economy by an average of 2 miles per gallon would result in a reduction in fuel usage of approximately 500,000 gallons of gas per year.

With this in mind, in 2008 Fleet Operations introduced the “Slow Down Sonoma County Campaign.” The objective was to encourage employees to follow 4 simple rules of driving.

- Drive the speed limit
- Maintain constant speeds
- Avoid fast starts and abrupt stops
- Limit idle time

Applying these rules consistently will improve vehicle fuel mileage, reduce wear and tear on the vehicles in the fleet and will likely reduce vehicle accidents caused by County drivers. Inclusion of “Slow Down Sonoma County” in this plan establishes these driving behaviors as “County Policy” so they become the “Rules of the Road for all County drivers.

Idle Reduction

The California Air Resources Board (CARB) has issued specific rules for idling of diesel powered vehicles and equipment operated in the State. The County has adopted a “Vehicle and Equipment Idling Policy” in order to meet the requirements outlined in the CARB rules.

Fleet Support Infrastructure:

Fleet Management Database/ Fuel Management System: Fleet Operations maintains a database that collects all usage and operational data from the County fleet including fuel usage. This database is the foundation for decision making when it comes to the County fleet. The continued maintenance and input of accurate data is essential to greening the fleet and sustainability. Departments are accountable for providing accurate and timely information to Fleet Operations when requested and Fleet Operations shall ensure that all data received is entered into the database immediately upon receipt.

GPS System – Retrofit fleet with a GPS system that performs the following functions:

- Track vehicle usage
- Track PM Compliance
- On-board engine diagnostics
- State Smog Inspections
- Vehicle Locator

Development of commercial as well as internal sources for fueling

Fleet Operations will continue to study and research new information on alternative fuels and assess if they are applicable in the County fleet. Possible alternative fuels include but are not limited to bio-diesel blends, ethanol blends, electricity and hydrogen.

Cost Control:

Fleet Operations shall monitor vehicle/equipment usage and costs and provide the following quarterly reports to departments:

Utilization Report - Miles driven by each vehicle during the quarter and year to date.

Fuel Usage Report - Fuel used by each vehicle during the quarter and year-to-date

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Fleet Operations shall provide the following reports to departments on an annual basis:

Annual Cost Reports - Total of costs for each assigned vehicle

Exception Reports – Information on vehicles that are exceptions to the averages for the reports above.

Sonoma County's Environmentally Preferable Purchasing Policy

1.0 Purpose

By including environmental considerations in our purchasing decisions, along with the traditional concerns of price, performance, and availability, the County of Sonoma will promote practices that improve public health and safety, reduce pollution, and conserve natural resources and energy.

2.0 Defining Environmentally Preferable

Environmentally preferable products and services are those that have a reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

When determining if a product is environmentally preferable, the following environmental attributes should be considered (see Appendix A for definitions):

- Biobased
- Biodegradable
- Carcinogen-free
- Chlorofluorocarbon (CC)-free
- Compostable
- Durable
- Energy efficient
- Heavy metal free (e.g., no lead, mercury, cadmium)
- Less hazardous
- Low volatile organic compound (VOC) content
- Low-toxicity
- Made from rapidly renewable materials
- Persistent, bioaccumulative toxic (PBT)-free
- Recyclable
- Recycled content
- Reduced greenhouse gas emissions
- Reduced packaging
- Refurbished
- Resource efficiency
- Reusable
- Upgradeable
- Water efficient

3.0 Balancing Environmental Considerations with Performance, Availability, and Financial Costs

The County is committed to buying more environmentally preferable goods and services as long as they meet performance needs and they are available within a reasonable period of time at a reasonable cost. Nothing in this policy shall be construed as requiring a purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition (as outlined in Procurement of Goods & Equipment Policies & Procedures), or are not available at a reasonable price or in a reasonable period of time.

The County will consider lifecycle costs or best value purchasing strategies when comparing costs of products or services. Life cycle costs include the life of the items, maintenance, operations, end of useful life, residual value, and replacement costs. Best value recognizes that competition exists not only in prices, but also in the technical competence of suppliers, their ability to make timely deliveries and the quality and

performance (including environmental performance) of their products and services. Best value purchasing principles allow flexibility to choose a vendor or contract without the lowest bid providing certain criteria are met that are in the best interests of the County.

4.0 Specifications, Solicitation Language, and Purchasing Regulation

The County's Purchasing Division shall ensure wherever possible, that specifications, solicitation language, and purchasing regulations are amended to expand the use of more environmentally preferable products in all procurements.

Whenever possible, specifications shall include the following:

- Sonoma County's goal is to expand the purchase and use of environmentally preferable products. In order to meet this goal we are requesting that suppliers complete an environmental (green) survey as part of their bid documentation.
- All products and services must meet or exceed the standards set by independent accredited organization in order to be deemed environmentally preferable. Examples of independent accredited organizations recognized by the County are as follows:
 - Environmental Choice www.environmentalchoice.com
 - Green Seal www.greenseal.org
 - Energy Star www.energystar.gov
 - EnerGuide <http://oee.nrcan.gc.ca/energuide>
 - EPEAT
 - PowerSmart www.bchydro.com
 - ISO 14000 www.iso.org/iso/home.htm
 - Sonoma County Water Agency www.scwa.ca.gov (water efficient toilets)
 - ABAG www.abag.ca.gov (listings of Green Businesses)

5.0 Promoting Environmental Purchasing

The following steps will assist the County in its commitment to purchasing more environmentally preferable goods and services. As noted in 3.0, goods and services must still meet performance needs and be available in a reasonable period of time at a reasonable cost.

5.1 County's Purchasing Division:

- Will promote the purchase of environmentally preferable products or products with a recycled or recyclable content over a virgin product if the cost is not greater than 5 percent (e.g., 5% preference).
- Shall ensure wherever possible, that specifications, solicitation language, and purchasing regulations are amended to expand the use of more environmentally preferable products in all procurements.
- Will consider lifecycle or best value costs in its consideration of costs.

- Will provide information on environmental purchasing on its website and intranet sites.
- Will continue to post information on the availability of surplus furniture, equipment and office supplies for reuse by other County departments.

5.2 County Departments:

- Are responsible for ensuring that its employees, contractors and vendors are aware of the County's desire to buy more environmentally preferable goods and services.
- Are responsible for ensuring that any of its employees who have been issued credit cards are fully aware of their responsibilities under this policy and other County procurement policies.

6.0 Policy Updates

The Purchasing Division will review and update the Environmentally Preferable Purchasing Policy when necessary.

7.0 Reference

Board adopts Climate Protection Plan by summary action on September 12, 2006

Res.#89-2195 – Board of Supervisors, Establishment of Policy for Procurement of Recycled Products

Res.# 2001-025 – Sonoma County Waste Management Agency, Adoption of Green Purchasing Policy

California Code, Public Contract Code relating to Local Governments and Buy Recycled Programs.

California Public Contract Code Section 12400-12404

1993 U.S. Government Executive Order

Environmental Purchasing Policies 101: An Overview of Current Environmentally Preferable Purchasing Policies, developed for Commission for Environmental Cooperation

8.0 Attachments

Appendix A – Environmental Purchasing Definitions

Appendix A
Environmental Purchasing Definitions

Environmental Purchasing terms reprinted from Environmental Purchasing Policies 101: An Overview of Current Environmentally Preferable Purchasing Policies, developed for Commission for Environmental Cooperation (www.cec.org)

Acute toxicity- Capable of producing illness from a single dose or minimal exposure.

Bioaccumulate - Ability of some substances to collect in plant and animal tissue. These substances increase in concentration as they pass through the food chain when the plants and animals are consumed by larger animals (such as humans).

Biobased product – Products produced from renewable plant and animal sources. They are generally presumed to be more environmentally benign than their petroleum based counterparts, although this is not necessarily true. They are usually biodegradable and can be returned to the earth at the end of their useful life or recycled and used again. As defined by the US Farm Security and Rural Investment Act (FSRIA), a biobased product is a product determined by the US Secretary of Agriculture to be a commercial or industrial product (other than food or feed), that is composed in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal and marine materials) or forestry materials.

Biodegradable – the ability of a substance to decompose in the natural environments into harmless raw materials. To be truly biodegradable, a substance or material should break down into carbon dioxide (a nutrient for plants), water, and naturally occurring minerals that also do not cause harm to the ecosystem. In terms of environmental benefits, a product should take months or years, and not centuries, to biodegrade.

Buyer - Anyone authorized to purchase on behalf of the organization or its subdivisions.

Carcinogen – A substance known to cause cancer in humans.

Chlorine free – Manufactured without chlorine or chlorine derivatives.

Chlorofluorocarbons (CFCs) – Any of a group of compounds that contain carbon, chlorine, fluorine, and sometimes hydrogen and have been used as refrigerants, cleaning solvents, aerosol propellants and in the manufacture of plastic foams. The uses of CFCs are being phased out because they destroy the planet's stratospheric ozone protection layer.

Chronic health risks – Detrimental, long term health effects from repeated exposure to a product.

Chronic toxicity – Capable of producing illness from repeated exposure

Compostable – A product that can be placed into a composition of decaying biodegradable materials and eventually turn into a nutrient-rich material. It is synonymous with “biodegradable”, except it is limited to solid materials (liquid products are not considered compostable).

Appendix A

Cooperative purchasing – System for allowing organizations to combine their purchasing power in order to negotiate better prices and reduce the purchasing costs of a formal bid process.

Durable - A product that remains useful and usable for a long time without noticeable deterioration in performance.

Energy efficient product – A product that is in the upper 25 percent of energy efficiency for all similar products, or that is at least 10 percent more efficient than the minimum level meeting US federal government standards.

Environmentally preferable products and services - Products and services that have a lesser or reduced effect on human health and the environment when compared with competing products and services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance and/or disposal of the product or service.

Extended producer responsibility – A product and waste management system in which manufacturers and consumers take responsibility for the environmentally safe management of products once the products reaches the end of their useful life. As the manufacturers have the greatest ability to influence product design, they have the greatest responsibility for the product's end of life reuse, refurbish, recycling, or legal disposal. Retailer “take back” or “mail back” programs are two such examples.

Flashpoint - The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

Full-cost accounting – Accounting for the economic, environmental, land use, human health, social and heritage costs and benefits of a particular decision or action to ensure no costs associated with the decision or action, including externalized costs, are left unaccounted. (Compare with Lifecycle Cost and Product Life cycle.)

Greenhouse gases – Any of several dozen heat-trapping trace gases in the earth's atmosphere that absorb infrared radiation. The two major greenhouse gases are water vapor and carbon dioxide; lesser greenhouse gases include methane, ozone (O₃), CFCs, and nitrogen oxides.

LEED (Leadership in Energy and Environmental Design) rating system – A self-assessment system developed by the US Green Building Council <www.usgbc.org> for rating the environmental preferability of new and existing commercial, institution, and high-rise residential buildings.

Life cycle cost – The amortized annual cost of a product or service, including capital costs, installation costs, operating costs, maintenance costs, and end of useful life costs discounted over the lifetime of the product or service. (Compare with Product Life cycle.)

Material Safety Data Sheet (MSDS) – Written or printed material about a product that includes information on though product's physical and chemical characteristics; physical and health hazards; precautions for safe handling and use; control measures; emergency and first aid procedures; the date of preparation of the MSDS or the last change to it; and the name, address, and telephone number of the manufacturer.

Mutagen – Substance that causes mutations, changes to genetic material in the body.

Appendix A

Persistent, bioaccumulative, toxic compounds (PBT's) – Toxic chemicals that persist in the environment and increase in concentration through food chains as larger animals consume PBT-laden smaller animals. They transfer rather easily among air, water, and land, and span boundaries of programs, geography, and generations. As a result, PBTs pose risks to human health and ecosystems. They are associated with a range of adverse human health effects, including effects on the nervous system, reproductive and developmental problems, cancer, and genetic impact. They include heavy metals and chemicals such as mercury, dioxins, and PCB's (polychlorinated biphenyls).

Post-consumer recycled content – Percentage of a product made from materials and byproducts recovered or diverted from the solid waste stream after having completed their usefulness as consumer items and used in place of raw or virgin material. Post-consumer recycled content includes materials (such as paper, bottles, and cans) collected for recycling.

Practicable – Sufficient in performance and available at a reasonable price.

Preconsumer materials – Recovered materials that were production finished materials, products or byproducts that did not reach the consumer for whose use they were intended, and have been diverted from the solid waste stream for the purposes of collection, recycling, and disposition.

Price preference – A percentage by which offered prices for recycled products are reduced for purposes of bid evaluation. For example, under a 5 percent price preference, if a bid of \$1.00 per unit is received for an environmentally preferable product meeting specifications, the bid price will be reduced by \$0.05 (5 percent) and evaluated as though it had been for \$0.95. If this bid results in a contract award the price actually contracted will be the bid price of \$1.00 per unit.

Product life cycle – The culmination of environmental impacts for a product, including raw material acquisition, manufacturing, distribution, use, maintenance, and end of useful life or ultimate disposal of the product. (Compare with Life cycle cost.)

Recyclable product – a product that after its intended end use can be diverted from the solid waste stream for use as a raw material in the manufacture of another product.

Recovered materials – Waste materials and by-products that have been recovered or diverted from the solid waste stream.

Recycled materials - Material and byproducts that have been recovered or diverted from solid waste and have been utilized in place of raw or virgin material in manufacturing a product. It is derived from post-consumer recycled materials, manufacturing waste, industrial scrap, agricultural waste, and other waste material, but does not include material or byproducts generated from, and commonly reused within, an original manufacturing process.

Refurbished product – A product that has been completely disassembled and restored to its original working order while maximizing the reuse of its original materials.

Renewable materials – Materials made from plant-based feedstock capable of regenerating in less than 200 years, such as trees and agricultural products. Rapidly renewable resources, such as grain-based feedstocks, regenerate in less than two years.

Appendix A

Sustainable - An action is sustainable if it satisfied present needs without compromising the ability of future generations to meet their needs.

Teratogen – A substance that adversely affects fetal development.

Upgradeable product – The ability to increase a product’s performance or features without replacing the product.

Virgin material – Any material occurring in its natural form. Virgin material is used in the form of raw material in the manufacture of new products.

Volatile organic compounds (VOCs) – Chemicals that readily evaporate and contribute to the formation of air pollution when released into the atmosphere. May VOCs are classified as toxic and carcinogenic.

Water efficient A product that is in the upper 25 percent of water efficiency for all similar products, or that is at least 10 percent more efficient than the minimum level meeting US federal government standards.