COUNTY OF SAN LUIS OBISPO

GENERAL SERVICES AGENCY

Administrative Guideline

Title: *Fleet Selection Criteria Policy*

Effective Date: March 12, 2013
Review Date: July 1, 2014
Prepared by: Rockford Buoy, Fleet Manager
Approved by:

1. Purpose

To establish a policy governing the purchase of County of San Luis Obispo ("County") vehicles, improve the county average fuel economy and improve regional air quality by reducing emissions. This policy sets forth a methodology which incorporates fuel efficiency and emission reductions as part of the complete lifecycle cost and vehicle operational standards.

2. Scope

This fleet policy applies to all county owned non-emergency vehicles. It specifies the recommended vehicle replacement criteria, including vehicle capabilities, lifecycle cost, availability of purchase capital and the availability of alternative fuels, parts and trained service technicians.

3. Goals:

3.1 Fuel Consumption - Purchase, when necessary, new vehicles that provide the best available net reduction in vehicle fuel consumption and emissions within the vehicle class/type, considering life-cycle economic and environmental impacts. Diesel Fired Pollutants - Reduce emissions of toxic air contaminants, including carbon monoxide (CO), nitrogen oxides (NO^X), and diesel-fired particulate matter (PM) and other pollutants produced by combustion of fossil fuels that endanger public health.

3.2 Gasoline Engine Pollutants - Reduce emissions of carbon dioxide (CO^2), a pollutant produced through combustion of fossil fuels.

3.3 Monitoring and Tracking - Monitor fleet performance criteria such as fuel efficiency, miles traveled, and compliance with State and Federal Emission requirements.

4. **Policy**

The County shall make every effort to purchase and use the most energy efficient and lowest emission producing non-emergency vehicles and equipment that meet vehicle operating requirements and reasonable standards for the total lifecycle cost of vehicle ownership. The County will purchase non-emergency fleet vehicles that provide the best available net reduction in fuel use and emissions within the vehicle class/type. This includes the purchase of Low Emission (LEV), Ultra-Low Emission (ULEV), Zero Emission (ZEV) and Alternatively Fueled Vehicles (AFV).

Fuel consumption and emission reduction targets shall be reviewed annually and modified based on vehicle availability for that model year. An annual report will be included in the Fourth Quarter Fiscal Report to the Board of Supervisors. The current objectives set forth in this policy include:

4.1 Improve the County average fuel economy on non-emergency vehicles by 2.5% each year, or by 15% by the end of fiscal year 2017-18.

4.2 Reduce the emissions of Carbon Dioxide (CO^2) by 20% by the end of 2020. This applies to non-emergency, gasoline powered light duty vehicles.

4.3 Reduce the emission of NO^x by a minimum of 35% when replacing diesel powered engines manufactured prior to 2009.

4.3.1 All on-road diesel engine purchases will be certified to meet or exceed the California Air Resources Board (CARB) mandated 0.2 grams of NO^x and 0.1 grams of PM per brake horsepower per hour (g/bhp/hr).

5. **Procedure**

The County will make every effort to purchase vehicles and equipment with the lowest lifecycle cost which meet the operational requirements of the user departments. The considerations will include but are not limited to:

- fuel efficiency
- availability of purchase capital
- emission reduction,
- alternative fuel availability
- availability of parts and service

5.1 <u>Vehicle operational requirements:</u>
Each vehicle's specific application is paramount. The County will not purchase vehicles with reduced capabilities which significantly hamper the intended application. Essential vehicle capabilities include, but are not limited to, cargo capacity, payload rating, towing capabilities, horsepower, fuel availability and travel range.

5.1.1 Department Heads seeking new or replacement vehicles will provide the Fleet Manager with required vehicle characteristics and capabilities necessary for the vehicles specific operational application. This information will include the department needs and the vehicle's current and future purpose. The Department Head will provide the Fleet Manager with documentation clearly identifying the department's stated needs and requested vehicle characteristics.

5.1.2 Fleet Manager will identify low emission and alternatively fueled vehicle's which meet all essential required vehicle capabilities.

5.1.3 Fleet Manager will evaluate all essential vehicle capabilities and determine the appropriate class, make and model.

5.1.4 The Fleet Manager will procure the vehicle with the lowest total cost of ownership and highest fuel efficiency, provided it meets the required capabilities and all other key criterion.

5.2 Lifecycle cost benefit analysis calculation:

The two cost considerations included in calculating vehicle lifecycle cost include ownership cost and operational cost. Ownership cost includes the total acquisition cost minus the depreciated resale value. Operational costs include fuel, maintenance and repair costs.

5.2.1 Ownership cost is determined by subtracting end of life resale value from initial acquisition cost.

5.2.1.1 Acquisition cost includes vehicle purchase cost plus all vehicle build-up parts and labor costs.

5.2.1.2 Projected end of life resale value is available from industry accepted sources.

5.2.2 Operational cost is determined by adding the projected fuel, maintenance and repair costs.

5.2.2.1 Total fuel consumption will be calculated using the U.S. Department of Energy (DOE) rating for the specific application of each vehicle.

5.2.2.2 To account for rising energy costs, lifetime fuel cost will be considered at 100%, 120% and 140% of current cost.

5.2.2.3 Maintenance and repair cost will be based on historical data and/or industry accepted sources.

5.2.2.3.1 The amount of fuel consumed is greatly influenced by the specific application of each vehicle. The increased fuel economy of hybrid, electric and alternative fueled vehicles is best realized during low speed applications such as city driving. Conversely, there is typically very little improvement in fuel economy for vehicles operating at highway speeds when compared to conventionally fueled vehicles in the same class. Appendix (1) illustrates the impact of vehicle application on fuel consumption.

5.2.3 Total lifecycle cost calculations data sources.

5.2.3.1 The total lifecycle cost of vehicles being considered for purchase is determined through the application of information available from accepted auto industry standards and real life experience with vehicles of the same make and model in the fleet inventory.

5.3 Other considerations:

- Vehicle reliability and readiness is paramount in the selection criteria.
- The availability of fuel and other infrastructure items will be considered.
- Alternative fuel technology is changing quickly and the availability of trained technicians, specialty tools, parts and dealership support will be important considerations in the selection of vehicles.

6. CAPITAL COST

Capital cost is the funds required to purchase vehicles. The initial acquisition cost of hybrid, electric or alternatively fueled vehicles is typically more than conventionally fueled vehicles of the same class. Any savings realized from these vehicles is from the operational cost. The user department will realize the operational savings throughout the life of the vehicle, but may be required to contribute to the acquisition cost.

6.1 Vehicle acquisition cost and sales proceeds

6.1.1 The fund required to procure vehicles is managed by Fleet Services at a level sufficient to pay for anticipated replacement vehicles.

6.1.1.1 The cost of purchasing hybrid, electric or alternatively fueled vehicles will typically exceed the cost of conventionally fueled vehicles in the same class.

6.1.1.2 The receiving department is responsible to pay all additional costs to procure the hybrid, electric or alternatively fueled vehicle.

7. DEFINITIONS

- Alternative Fuel:
  Any fuel, other than gasoline, diesel or other substantially petroleum based fuels that is less polluting than gasoline or diesel fuel. These include, but are not limited to, natural gas, propane, ethanol, electricity and bio-diesel with a blend of 5% or more.

- Alternative Fuel Vehicle (AFV):
  Any motor vehicle powered in whole, or in part, by non-petroleum based Vehicles fuels.

- Carbon Dioxide (CO^2):
  A standard component of conventionally powered vehicle emissions and a principal greenhouse gas.

- Conventionally Powered Vehicle:
  Vehicles with gasoline or diesel fueled internal combustion engines

- Emergency Fleet:
  Public safety response vehicles used by the County Sheriff's Department and CalFire.

- Fleet:
  All vehicles and equipment owned by the County of San Luis Obispo, including those owned and managed by the General Services Agency, Fleet Services Department.

- Hybrid Vehicle:
  Any vehicle propelled from an onboard internal combustion engine as well as from an on board source of stored energy

- Oxides of Nitrogen (NO^x):
  A byproduct of diesel fuel powered internal combustion engines

8. EXCEPTIONS

Exceptions to this policy will be considered on a case by case basis. Department Heads requesting an exception to this policy will submit their reasons for the exception in writing to the Fleet Manager.

9. ALIGNMENT

This Fleet Emission Reduction Policy meets or exceeds the criteria outlined within the San Luis Obispo County General Plan, Conservation and Open Space Element, Chapter 5 Energy.

10. REVISION HISTORY

Version	Date	Chapter/Section	Details
1.0	Initial date	All	New Policy