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Bill Richardson, DOE

TO: Chairman Meserve

FOR SIGNATURE OF : \*\* GRN \*\* CRC NO: 00-0671

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and Transportation Efficiency (E.O. 13149)

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**AUTHOR:** BILL RICHARDSON  
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The Secretary of Energy  
Washington, DC 20585

October 31, 2000

The Honorable Richard A. Meserve  
Chairperson  
Nuclear Regulatory Commission  
One White Flint North Building  
11555 Rockville Pike  
Rockville, MD 20852

Dear Mr. Chair:

As required by Executive Order 13149, *Greening of the Government through Federal Fleet and Transportation Efficiency*, the Department of Energy (DOE) has prepared a guidance document (copy enclosed) to help agencies understand the specific requirements of the new Executive Order. We have already distributed a copy of the guidance document to agency representatives serving on the Federal Interagency Energy Policy Committee.

Each agency should have already designated a senior-level official to assume responsibility for the agency's alternative fuel vehicles and fleet fuel-efficiency program, for meeting the requirements of the Order, and should have submitted this information to the DOE. If this has not yet been accomplished, we would appreciate your assistance to expedite this process. Each agency is also required to develop its strategy for meeting the requirements of the Executive Order and to submit that strategy to DOE. In consultation with the Office of Management and Budget, we have extended the original deadline for the strategy submission from October 18, 2000, to November 1, 2000. Your representative on the Federal Interagency Energy Policy Committee has already been notified of this extension. To facilitate the approval process, agencies are requested to submit their strategy at the earliest possible time.

We look forward to working with your agency to meet the requirements of this Executive Order. Should you have questions or need additional information, please contact Mr. Dan W. Reicher, Assistant Secretary for Energy Efficiency and Renewable Energy, at (202) 586-9220.

Yours sincerely,

Bill Richardson

Enclosure



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**Executive Order 13149: Greening the Government  
through Federal Fleet and Transportation Efficiency**

**Guidance Document for Federal Agencies**

**October 2000**

**Prepared by  
Office of Technology Utilization  
Office of Energy Efficiency and Renewable Energy  
U.S. Department of Energy**

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## Introduction

When President Clinton signed Executive Order (E.O.) 13149, *Greening the Government through Federal Fleet and Transportation Efficiency*, on April 21, 2000, he directed Federal agencies to take a leadership role in the reduction of vehicular petroleum consumption. In particular, *each agency operating 20 or more motor vehicles within the United States, must develop and implement a strategy for reducing its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels, through increases in fleet efficiencies and the use of alternative fuels.*

This *Guidance Document* has been prepared to help agencies understand the specific requirements of the new Executive Order, and to develop a strategy for meeting them. It discusses various methods an agency can use to meet the new requirements and demonstrates simple calculations for determining the agency's fleet fuel economy and petroleum consumption. It also thoroughly explains reporting requirements and the Federal Automotive Statistical Tool (FAST), which will be used for reporting. Appendix 1 points the reader to resources for additional information and assistance, Appendix 2 provides definitions of terms, and Appendix 3 sets forth a timeline for reports and other necessary agency submissions. A copy of Executive Order 13149 appears as Appendix 4.

The document has been prepared with the needs of the agencies in mind and to make it easier to achieve the goal of Executive Order 13149, *a 20 percent reduction in annual petroleum consumption by FY 2005*, within the constraints of each agency's unique fleet requirements. Independent agencies and agencies exempted from coverage by section 304 are not required but are urged to comply with the new Order.

The new Order does not replace the Energy Policy Act of 1992 (EPAct), whose alternative fuel vehicle (AFV) acquisition requirements must continue to be met. Under this authority, 75 percent of vehicle acquisitions in the agency's covered fleet are required to be AFVs. E.O. 13149 requires agencies to develop and implement a plan for achieving a 20 percent reduction in its motor vehicle fleets' petroleum consumption by FY 2005 compared to a FY 1999 baseline, in addition to the EPAct AFV acquisition requirements. Key provisions of the Order highlighted and explained in this guidance document to help agencies achieve this goal include:

- The designation of a senior-level official, by the head of each agency, to assume the responsibilities associated with this Order and the agency's AFV and fleet fuel efficiency programs
- The development of an agency compliance strategy for meeting the requirements of this Order
- The requirement that agencies must use a combination of energy efficiency and alternative fuel use activities to successfully achieve the goal of this order

- Working closely with DOE and GSA to resolve tracking issues related to alternative fuel usage with the alternative and petroleum fuel providers
- Collaborating with the Federal AFV Utilization Supporting Expansion of Refueling Program (AFV USER) participants, currently Albuquerque, Denver, Kennedy Space Center/Melbourne-Titusville, Minneapolis/St. Paul., Salt Lake City, and San Francisco Bay Area, (for those fleets located in those cities) to develop, expand and use alternative fuel infrastructure
- Cooperating with local Clean Cities Coalitions in efforts to expand the use of alternative fuel vehicles and to work together on infrastructure development projects

### **2-2-2-2 Acquisition of Higher Fuel Economy Vehicles**

Under Section 202(b) of the Order, agencies shall increase the agency-wide fuel economy of new acquisitions of light-duty petroleum-fueled vehicles by at least 1 mile per gallon (mpg) by FY 2002, and by at least 3 mpg by FY 2005, compared with FY 1999 baseline acquisitions. In calculating the fuel economy requirement of the E.O., the entire agency's acquisitions of light-duty vehicles should be considered, subtracting out exempt (military tactical, law enforcement and emergency) vehicles and alternative fuel vehicles. Each agency will be annually reporting progress in achieving these goals in FY 2002 and FY 2005. See Table 6 for an example of how to calculate average fuel economy of agency's non-exempt light-duty acquisitions.

Under EPO Act, 75 percent of the agency's covered fleet acquisitions are required to be alternative fuel vehicles. This means the agency can consider the acquisition of light-duty vehicles (LDVs) with a higher DOE/EPA combined fuel economy rating for that portion of its fleet that will be fueled by conventional fuels. (See Appendix 2 for a definition of fuel economy rating.)

There are several other methods available to agencies to increase the fuel economy of its future acquisitions. These include the following:

any agency's strategy, the key point is to accomplish the maximum amount of work with each vehicle. An added benefit is that smaller vehicles tend to have lower procurement and operating costs.

- **A decrease in vehicle miles traveled (VMT).** A fleet may be able to reduce its petroleum consumption by reducing the miles traveled by many of its vehicles. For example, agencies may choose to decrease the number of vehicles traveling to nearby locations by combining the trips using only one vehicle. Drivers should be encouraged to conduct their operations efficiently, for example, by timing trips to avoid rush hour. Encouraging employees to take advantage of teleconferencing or to use mass transit when attending meetings are other examples of how agencies could reduce the VMT of its fleets.

#### **2-2-4 Management Approaches To Achieving the Goal of E.O. 13149**

An agency can consider additional management measures to include in its strategic plan for implementing the E.O. For example, agencies may create employee incentive programs to reward exceptional performance, dedication, and leadership in executing resourceful solutions to achieve the goals of this Order.

Performance evaluations could be modified to include measurement of an employee's effort for implementing the E.O., if deemed appropriate. The plan might include evaluations of officials such as agency heads, the senior-level official, fleet managers, fleet supervisors, and other relevant employees, in order to encourage optimal performance within the agency.

#### **2-2-5 Guidelines for Strategy Development**

When agency strategies are submitted to DOE for evaluation, sufficient detail and supporting data for each element of the strategy must be provided to show how the proposed strategy will achieve a 20 percent reduction in petroleum use by the methods chosen. Details in the written strategy should, for example, indicate the agency's goals and objectives from year to year.

For example, if an agency plans to achieve the majority of its petroleum-reduction goal by using alternative fuel in its AFVs, it will need to provide baseline figures for FY 1999, including agency-wide petroleum consumption, and the total number of existing alternative fuel and petroleum-fueled vehicles in its fleets. The agency also needs to identify the quantity of petroleum it plans to displace. When this data has been compiled, the agency must describe its strategy to reach the reduced level of consumption in its fleets. If an agency's fleets are already using more than 50 percent alternative fuel, or close to it, the agency should also provide baseline figures for alternative fuel use.

DOE recommends strongly each agency submit a draft copy of its strategy for evaluation prior to the October 18, 2000 due date for the final strategic plans. Sending a draft of the strategy and data by early October would be ideal. This will speed up the evaluation process and ensure that the final strategy has an excellent chance of being approved. Due to the review and reporting schedule required by OMB and the White House, no extensions to the October 18<sup>th</sup> deadline can

acquisition plans for FY 2001 and FY 2002. The designated senior-level agency official is responsible for signing off on the report prior to its submission to DOE.

To facilitate the tracking of vehicle acquisitions and fuel use, DOE has established an on-line reporting system named Federal Automotive Statistical Tool (FAST). The system has the ability to store and track all data entered by the agencies, and can also be considered a useful management tool for agency fleets. Agencies will use the FAST system to collect the data and aggregate the information needed to be submitted with the written report to DOE (see 2-3-3).

The FAST tracking system provides a convenient format for all Federal fleets to use in preparing progress reports toward meeting the goals of the Order while providing DOE with flexibility in analyzing and presenting the data to OMB, the White House, and Congress in the various reporting formats necessary. In addition, FAST will collect and process data for SF-82 reporting, beginning with FY 2000.

### **2-3-1 Obtaining Access to FAST**

Access to the FAST on-line reporting system will be established for all senior-level agency officials on record. Some agencies may wish to provide this access to other representatives who are designated by the senior-level official to work on the agency's compliance with the Order. An access code to FAST may be obtained for these individuals by contacting Shab Fardanesh, Program Manager for the Federal Fleet Program, through e-mail at: [shabnam.fardanesh@ee.doe.gov](mailto:shabnam.fardanesh@ee.doe.gov). Be sure to provide the representative's name, title, e-mail address, telephone number, and department.

FAST is customized to fit the hierarchical needs of each agency. Typically, most agencies will report on a pyramid level, starting with the fleet manager entering the raw data. The report will automatically move forward to the next level, until it reaches the senior-level official in charge of this program at the agency's headquarters. At each level, reviewers may only change data at their level or for the level(s) directly below them. Once the senior-level agency official has approved the report, it will be sent to DOE headquarters for evaluation and then forwarded to OMB.

### **2-3-2 Components of a FAST Report**

If agencies have vehicles in more than one location, ***a complete, separate data set must be entered in FAST for each geographically separate fleet.*** FAST then collects this fleet by fleet data and aggregates it into one agency-wide report. The following information is required for each location:

- **Fleet Profile Header.** Contact information for the site fleet manager, the submitting official, the regional representative, and the bureau representative (or other appropriate structure) are provided in this portion, along with basic site information such as fleet location. Once the reporting data has been successfully entered and approved by the fleet manager, the report is electronically transmitted to the next level. This "layered" process continues until the report

finally reaches agency headquarters for final review and approval. Combined, the fleet profiles are used to establish an agency's fleet structure.

- **Vehicle Data.** Data on all acquisitions of alternative fuel, gasoline, and diesel vehicles must be reported on this system for the previous, current, and following year's vehicle acquisitions (e.g., FY 2000 actual, FY 2001 planned, and FY 2002 projected acquisitions). To facilitate data entry the system provides a list of vehicles available to the Federal fleet in the current fiscal year. In addition, columns are provided for inputting the number of vehicles and the total of each vehicle type in the fleet's inventory for the previous fiscal year.
- **Fuel Consumption.** Data on fuel consumption of all types, including gasoline, diesel, and all alternate fuels, is reported for each location. Fuel consumption by non-exempt and exempt vehicles should be identified. The best way to obtain good data for alternative fuel use is to have fleets provide the data. Another way to collect data on gasoline and diesel fuel use is to obtain the agency's petroleum fuel use data submitted for the Federal Energy Management Program's (FEMP's) *Annual Report to Congress on Federal Government Energy Management and Conservation Programs*. Quantities of fuel used should be reported in natural units and will then be converted automatically to gasoline gallon equivalents (gge) by FAST.

*TIP: Enter alternative fuel data by fleets. However, it will probably be more accurate for the agency head to enter aggregate data on gasoline and diesel consumption across the agency.*

### **2-3-3 Submission of Annual Report**

By November 1<sup>st</sup>, each agency must submit to DOE the agency's data report for the prior fiscal year, and a written statement of how it is meeting the requirements of the E.O.. The FAST system collects and aggregates the data for this report. Prior to its final submission, reviewers within the agency will have the ability to go on-line and view the latest data entered in the FAST system. When the FAST report has been finalized and approved within the agency, a hard copy of the final version shall be forwarded to DOE along with a written statement on the agency's progress towards compliance. If an agency is falling behind in accomplishing its plans, a change to the original strategy may be needed.

### **2-3-4 Accountability**

DOE, using data submitted by the agencies will prepare a scorecard on the annual reports of the agencies. This scorecard will be sent to the Office of Management and Budget, White House, and Congress, and will be posted on the Internet.

## **3-0 Applicability of the Executive Order**

As already stated, Section 201 of the Executive Order applies to all agencies operating 20 or more motor vehicles within the 50 states and the District of Columbia. Independent agencies and

agencies with fewer than 20 vehicles are exempted from coverage; however, they are encouraged to comply with the provisions of this Order.

Agencies must ensure that all Government-owned, contractor-operated vehicles and facilities comply with the applicable goals of this Order. These requirements and goals should be included in each contractor's management contract.

### **3-1 Exemptions and Classes of Exempt Vehicles**

Each agency claiming vehicle exemptions under the E.O. must provide information in its annual report to DOE and OMB on the number of each class or type of vehicle claimed as exempt, along with an estimate of the total annual fuel consumption of exempt vehicles. Exempt vehicles fall into several classes:

- Military tactical vehicles
- Law enforcement vehicles
- Emergency vehicles
- Any other class or type of vehicle that OMB determines to be exempt from this Order

There are significant difference between exemptions under EPAct and the Executive Order. Under EPAct, 75 percent of new covered LDV acquisitions must be alternative fuel vehicles, but this requirement applies only to vehicles operated within Metropolitan Statistical Areas (MSAs) with a population of 250,000 or more. Vehicles located outside of these MSAs are geographically exempt from EPAct requirements for AFVs. *Military tactical, law enforcement, and emergency vehicles* are also excluded from EPAct requirements.

Under Executive Order 13149, only military tactical, law enforcement and emergency vehicles are exempt from the requirements, and the fleet, less these exemptions, has to satisfy the Order's requirement of a 20 percent reduction in petroleum use. There is no geographic exemption from the requirements of E.O. 13149.

A more complete description of law enforcement and emergency vehicles is provided in Appendix 2.

### **3-2 Vehicle Credits for EPAct Compliance**

Agencies will earn one AFV acquisition credit toward EPAct compliance for each AFV acquisition, regardless of geographic placement or exemption status. To maintain the emphasis on actual alternative fuel use, dedicated and electric vehicles will receive additional credits. Dedicated alternative fuel medium- and heavy-duty vehicles earn multiple credits because they displace more petroleum and reduce more emissions on a per mile basis compared to light-duty vehicles. Credits will be earned as shown in Table 9.

## **4-0 General Provisions**

There are several general provisions included in Executive Order 13149:

- **Revocation.** This Order supersedes section 9 and 10 of Executive Order 12759 of April 17, 1991. Executive Order 13031 of December 13, 1996, is revoked.
- **Statutory Authority.** Agencies must carry out the provisions of this Order to the extent consistent with its statutory authority.
- **Limitations.** This Order is intended only to improve the internal management of the Executive branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person.

## **5-0 Specific Agency Responsibilities**

As mentioned in 2-1, certain duties are assigned to other Federal agencies to support the primary goal of this Order. These agencies include the Office of Management and Budget, the Department of Energy, the Environmental Protection Agency, and the General Services Administration. The respective duties of these agencies are summarized in the next four sub-sections.

### **5-1 Duties of the Office of Management and Budget**

- Shall designate a senior official to assume the responsibility for coordinating the collection of agency budget and data submissions pursuant to this Order;
- Amend and issue budget guidance to the agencies that requires each agency to identify in its annual budget submission the funding necessary to meet the requirements of this Order;
- Review annual agency budget submissions to determine adequacy in meeting the goal of this Order and to balance requests for increased funding to support achievement of the goals against other mission priorities for the agency; and
- Review agency submissions for the annual report to Congress, after budget decisions are made.

### **5-2 Duties of the Department of Energy**

- Issue guidance on strategy development, data reporting, and overall compliance with the requirements of this Order to Federal agencies, within 90 days of its issuance.
- Review and evaluate agency strategies prior to final submission to OMB.
- Provide OMB copies of evaluations of agency strategies.

- Provide whatever additional support OMB requires to facilitate its role.
- Establish a data collection and reporting system to be used by all Federal agencies to demonstrate the agency's performance in meeting the goals of this Order.
- Educate other agencies on the requirements of this Order.
- Review agencies' annual data submissions for accuracy and produce a scorecard of agencies' and overall Federal compliance with this Order and other applicable statutes and policies.
- Report annually to the President, to OMB, and to Congress on the agencies' compliance with this Order, including the scorecard and level of performance in meeting its strategies; the report will also be posted on DOE's Web site.

### **5-3 Duties of the Environmental Protection Agency**

- Lend support to DOE and GSA to help agencies acquire lower-emitting Tier II vehicles pursuant to availability (see Appendix 2 for a definition of Tier II vehicles; further information is available at [www.epa.gov/OTAQ](http://www.epa.gov/OTAQ)).

### **5-4 Duties of the General Services Administration**

- Work with agencies to discuss and plan efforts to ensure that GSA-leased fleets demonstrate progress towards achieving the goals of this Order.
- Develop and implement strategies to ease the financial and administrative burdens of agencies associated with the acquisition of AFVs. Options should include:
  - Pay the incremental costs associated with AFV acquisition with a lump sum payment for current acquisitions and pay for future incremental costs over the term of the lease of the current vehicle.
  - Spread the incremental costs for future AFVs throughout the entire fleet over 12 months. This will allow agencies to pre-pay the incremental costs of planned acquisitions.
  - Spread the current AFV incremental costs over the agency's entire fleet for a period of 12 months through a surcharge added to each vehicle's lease rate.
- Provide a summary of the agency's AFV acquisition plans to potential AFV manufacturers by August 19, 2000, to assist agencies with its production planning. GSA shall provide agencies with a list of available information on production plans at least four (4) months prior to the agency's ordering cycle.
- Develop methods that will help Federal agencies acquire fuel-efficient and Tier II vehicles with the assistance of DOE and EPA.
- Assist agencies with data needs.

## **6-0 Environmental Considerations**

Section 403 requires agencies to consider the environmental effects of various motor vehicle products and low-emission vehicles, and adjust procurement practices to encourage the use of environmentally preferable motor vehicle products.

### **6-1 Green Products**

Consistent with Executive Order 13101 and Section 6002 of the Resources Conservation and Recovery Act, agencies are encouraged to acquire environmentally friendly motor vehicle products as long as such products are reasonably available and meet the vehicle manufacturer's recommended performance standards. Details include the following:

- Effective October 21, 2000, no Federal agency shall purchase, sell, or arrange for the purchase of virgin petroleum motor vehicle lubricating oils when re-refined motor vehicle lubricating oils are reasonably available and meet the manufacturer's recommended performance standards.
- Agencies shall acquire and use EPA-designated Comprehensive Procurement Guideline items, including, but not limited to, retread tires as well as other recycled-content products such as tires containing a minimum of 5 to 10 percent post-consumer recovered rubber.
- Federal agencies are encouraged to use biobased motor vehicle products when they are reasonably available and meet applicable performance standards.

### **6-2 Tier II Vehicles**

The U.S. Environmental Protection Agency (EPA) has recently set significantly lower emissions standards for vehicles. These new regulations will result in the production of cleaner "Tier II vehicles." Light-duty Tier II vehicles will be phased in between 2004 and 2007; the phase-in of medium- and heavy-duty vehicles will begin in 2009. The new standards also call for lower sulfur levels in gasoline. It is highly recommended that Federal fleets consider the acquisition of these cleaner vehicles, as they become available. More information on Tier II vehicles is available on the EPA web site at [www.epa.doe.gov/OATQ](http://www.epa.doe.gov/OATQ).

**Appendices**

## Appendix 2: Definitions

**Acquisition** – A vehicle acquired for a Federal fleet that is a (1) new purchase; (2) newly leased vehicle, whether leased through GSA or commercially; or a (3) leased vehicle that replaces an existing leased vehicle. Leased acquisitions are counted in the fiscal year in which they are ordered. For example, a vehicle that was ordered in FY 1999, but is delivered after October 1, 2000, will count as a FY 1999 acquisition. Used vehicles acquired through lease or purchase by an agency do not count as acquisitions.

**Agency Owned Vehicle** – A vehicle purchased by a Federal agency.

**Alternative Fuel** – Qualifying fuels include methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas (compressed or liquefied); liquefied petroleum gas (propane); hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials, including neat (100%) biodiesel and P-Series fuel; and electricity (including electricity from solar energy).

**Alternative Fuel Vehicle (AFV)** – A dedicated, flexible-fuel, bi-fuel, or dual-fuel vehicle powered by alternative fuel.

**Automobile** – See definition for motor vehicle.

**Bi-Fuel Vehicle** – A vehicle with two separate fuel systems designed to run on either an alternative fuel, or gasoline or diesel, using only one fuel at a time. Bi-fuel vehicles are referred to as “dual-fuel” vehicles in EPAct.

**Biodiesel** – A biodegradable transportation fuel for use in diesel engines, which is produced through transesterification of animal, plant, or waste oils.

**Consolidated Metropolitan Statistical Area (CMSA/MSA)** – As used in the Energy Policy Act (EPAct), geographical areas defined by the Bureau of Census that includes cities or combinations of multiple cities with large population concentrations. The Metropolitan Statistical Area (MSA) refers to geographical areas that generally include one city with a smaller population concentration. For Federal fleet EPAct mandates for AFVs, use of the terms CMSA and MSA are limited to areas with a 1995 population of 250,000 or more, as determined by the Bureau of the Census.

**Conventional Fuel Vehicle** – A vehicle that is powered by an internal combustion engine that utilizes gasoline, reformulated gasoline, diesel fuel, or a biodiesel blend as its fuel source.

**Dedicated Alternative Fuel Vehicle** – A motor vehicle that is designed to operate solely on alternative fuel.

**Designated Senior-Level Agency Official** – A high level agency official, such as an Assistant Secretary (or equivalent-level official), designated by the head of each agency to carry out the responsibilities associated with the compliance of this Order, as well as other similar programs.

**DOE** – U.S. Department of Energy.

**Dual-Fuel Vehicle** – A motor vehicle with two separate fuel storage systems that operates on a mixture of alternative fuel and petroleum-based fuel.

**Environmentally Preferable Motor Vehicle Product** – Products required for the normal operation of a vehicle that have a limited impact on the environment because they are low-polluting, or have a recycled content, or are based on renewable resources. E.O. 13149 encourages Federal agencies to make use of re-refined lubricating oils, retread tires, tires containing post-consumer recovered rubber, and biobased products, wherever they are reasonably available and meet vehicle manufacturer specifications.

**EPA** – U.S. Environmental Protection Agency.

**EIA** – Energy Information Administration

**EPAct** – The Energy Policy Act of 1992.

**FAST** – Federal Automotive Statistical Tool, an on-line data collection reporting system established by DOE to track the vehicle acquisitions and fuel use of Federal fleets.

**FEMP** – Federal Energy Management Program

**Federal Agency** – Any executive department, military department, government corporation or Government controlled corporation, or other establishment in the executive branch of the government.

**Flex-Fuel (or Flexible-Fuel) Vehicle** – A vehicle with a single fuel tank that is capable of operating on alternative fuel, petroleum fuel, or a mixture of the two.

**Fuel Economy Rating (Guide)** – A document that reports the fuel economy of the various makes and models of passenger cars and light trucks. EPA collects the data and DOE publishes and distributes the guide each October. A worksheet based on this document is available on the FAST tracking system to help each Federal agency calculate the average fuel economy of its fleets for its annual reports to DOE, required under E.O. 13149.

**GSA** – General Services Administration.

**GVWR** – Gross Vehicle Weight Rating; the weight of a vehicle, including payload.

**Harmonic Average** – The reciprocal of the arithmetic mean of the reciprocals of a set of fuel economy figures.

**Heavy-Duty Vehicle** – A vehicle weighing more than 16,000 lbs GVWR and certified for use on all public roads and highways.

**Incremental Cost** – The additional cost of acquiring an alternative fuel vehicle over a comparable conventionally fueled vehicle.

**Independent Agency** – Government establishments such as the National Science Foundation, that are not part of the executive branch of the government.

**Law Enforcement/Emergency Vehicles** – Those vehicles that have been fitted with emergency lights and a siren along with other modifications such as heavy-duty or high-performance suspensions and drive trains. This exemption also covers vehicles that may be used occasionally for the purpose of surveillance or undercover operations, or that will be transferred into law enforcement service in the future, as long as these vehicular models are not mass-produced (more than 25,000 annually) as alternative fuel vehicles and publicly purchased.

If a fleet is claiming any exemptions under these provisions, a brief explanation of the numbers and types of vehicles being exempted and the justification for using them should be provided to DOE (e.g., “50 mid-size sedans exempted because they provide protective services to embassies; 200 full-size sedans, minivans, and light trucks exempted for field agent and surveillance use.”) Note that the example provides adequate detail to justify the exemptions, while providing sufficient aggregation to prevent specific law-enforcement vehicles from being identified.

**Leased Acquisition** – A new or replacement vehicle acquired under a rental contract or similar arrangement.

**Light-Duty Vehicle** – A vehicle weighing 8,500 pounds GVWR or less. For the purposes of EPA reporting, light-duty vehicles are also general purpose vehicles, certified for use on all public roads and highways.

**Medium-Duty Vehicle** – A motor vehicle of more than 8,500 lbs and less than or equal to 16,000 lbs GVWR. For purposes of EPA reporting, medium-duty vehicles are also certified for use on all public roads and highways.

**Military tactical vehicles** – Motor vehicles acquired and used for purposes that the Secretary of Defense has certified to DOE must be exempt from this Order’s requirements for Federal fleet fuel efficiency and alternative fuel vehicle acquisitions, for reasons related to national security.

**Motor Vehicle** – A self-propelled vehicle that meets the definition of section 215(2) of the Clean Air Act (42 U.S.C. 7550(2)) and is fully Federal Motor Vehicle Safety Standards certified for operation on all public roads and highways, designed for transporting persons or property. (**Automobile** means a 4-wheeled vehicle propelled by conventional fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and highways.)

**OMB** – Office of Management and Budget.

**Submitting Official** – The official at the operations or regional office level who is responsible for the data for a particular fleet.

**Site Zip Code** – The zip code for the geographic area in which a fleet is primarily operated.

**Tier II** – EPA’s new emission standard to control air pollution from motor vehicles. A single average exhaust emission standard will be phased in to cover both passenger cars and light-duty trucks that operate on any fuel. Under this standard, refiners are also required to produce lower-sulfur gasoline. Agencies should consider adding Tier II vehicles to its fleets when they become available. The Web site, [www.epa.gov/OATQ](http://www.epa.gov/OATQ), contains additional information on the Tier II standard.

## **Appendix 4: Executive Order 13149**

### **EXECUTIVE ORDER: GREENING THE GOVERNMENT THROUGH FEDERAL FLEET AND TRANSPORTATION EFFICIENCY**

April 21, 2000

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Energy Policy and Conservation Act, as amended (42 U.S.C. 6201 et seq.), the Energy Policy Act of 1992 (Public Law 102-486), section 301 of title 3, United States Code, and the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388), it is hereby ordered as follows:

#### **PART 1 PREAMBLE**

**Section 101. Federal Leadership.** The purpose of this order is to ensure that the Federal Government exercises leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and the use of alternative fuel vehicles (AFVs) and alternative fuels. Reduced petroleum use and the displacement of petroleum by alternative fuels will help promote markets for more alternative fuel and fuel efficient vehicles, encourage new technologies, enhance the United States' energy self-sufficiency and security, and ensure a healthier environment through the reduction of greenhouse gases and other pollutants in the atmosphere.

**Sec. 201. Reduced Petroleum Fuel Consumption .** Each agency operating 20 or more motor vehicles within the United States shall reduce its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels.

**Sec. 202. Performance Strategies.** Agencies have numerous options for developing a strategy to meet the petroleum reduction levels established in section 201 of this order. Measures include: the use of alternative fuels in light, medium, and heavy-duty vehicles; the acquisition of vehicles with higher fuel economy, including hybrid vehicles; the substitution of cars for light trucks; an increase in vehicle load factors; a decrease in vehicle miles traveled; and a decrease in fleet size. Each agency will need a strategy that includes most, if not all, of these measures, but can develop a strategy that fits its unique fleet configuration and mission requirements. As part of the strategy, each agency should attempt to accelerate the introduction of vehicles meeting Tier 2 standards. Where feasible, agencies should also consider procurement of innovative vehicles, such as hybrid electric vehicles, capable of large improvements in fuel economy. The strategy should also attempt to minimize costs in achieving the objectives of this order. In developing its strategy, each agency shall include the following:

(a) **AFV Acquisition and Use of Alternative Fuels.** Each agency shall fulfill the acquisition requirements for AFVs established by section 303 of the Energy Policy Act of 1992. Agencies shall use alternative fuels to meet a majority of the fuel requirements of those motor vehicles by the end of FY 2005. Section 402 of this order addresses related issues of alternative fuel infrastructure availability and the ability to track alternative fuel usage data; and

(b) **Acquisition of Higher Fuel Economy Vehicles.** Agencies shall increase the average EPA fuel economy rating of passenger cars and light trucks acquired by at least 1 mile per gallon (mpg) by the end of FY 2002 and at least 3 mpg by the end of FY 2005 compared to FY 1999 acquisitions.

**Sec. 301. Leadership Responsibilities.** The Office of Management and Budget (OMB), the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the General Services Administration (GSA) shall be responsible for providing leadership to the other Federal agencies in implementing programs to meet the goals of this order. Therefore, they shall perform the following activities:

(a) OMB shall:

(1) designate a senior official to assume the responsibility for coordinating the collection of agency budget and data submissions pursuant to this order;

(2) amend and issue budget guidance to the agencies that requires each agency to identify in its annual budget submission the funding necessary to meet the requirements of this order;

(3) review annual agency budget submissions to determine adequacy in meeting the goal of this order and to balance requests for increased funding to support achievement of the goals against other mission priorities for the agency; and

(4) review agency submissions for the annual report to the Congress, after budget decisions are made.

(b) DOE shall:

(1) issue guidance to agencies, within 90 days of the issuance of this order, on preparation and submission of agency strategies of complying with this order and the collection and annual reporting of data to demonstrate compliance with this order;

(2) review and evaluate agency strategies prior to their submission to OMB;

(3) provide OMB with copies of the agency strategy evaluations;

(4) provide whatever other support OMB requires to facilitate performance of OMB's role;

(5) establish the data collection and reporting system outlined in the DOE guidance for collecting annual agency performance data on meeting the goals of this order and other applicable statutes and policies;

(6) educate personnel from other agencies on the requirements of this order, the data collection and reporting system, best practices for improving fleet fuel efficiency, and methods for successfully acquiring and using AFVs;

(7) review agencies' annual data submissions for accuracy and produce a scorecard of agency and overall Federal compliance with this order and other applicable statutes and policies; and

(8) report to the President annually on compliance with the order, including the scorecard and level of performance in meeting the goals of the agencies' strategies.

(c) EPA shall support DOE and GSA in their efforts to assist the agencies in the accelerated purchase of Tier 2 vehicles.

(d) GSA shall develop and implement strategies that will ease agencies' financial and administrative burdens associated with the acquisition of AFVs, including:

(1) Agencies shall be allowed to replace their conventionally-fueled vehicles with AFVs by making an initial lump-sum payment for the additional acquisition cost of the AFV and shall be allowed to contribute to the higher replacement costs of the AFV incrementally over the term of the lease, and have the option of averaging AFV incremental costs across the agency fleet as provided by the Energy Policy Act of 1992.

(2) Within 120 days of this order, the Administrator of GSA, in consultation with other agencies, shall:

(A) provide a summary of agency AFV acquisition plans to potential AFV manufacturers to assist in their production planning. At least 4 months in advance of agency vehicle ordering cycles, GSA must provide to agencies the best available information on the production plans of AFV manufacturers;

(B) develop, in coordination with DOE and EPA, methods that will help Federal fleet managers to select vehicles to improve fleet fuel efficiency and to meet Tier 2 vehicle standards; and

(C) collaborate with its customer agencies and their procurement staff and officials to discuss and plan efforts to ensure that the GSA-leased fleet is making progress toward the goals of this order.

**Sec. 302. Designation of Senior Agency Official.** Within 90 days of the date of this order, the head of each agency shall designate a senior official to assume responsibility for the agency's AFV and fleet fuel efficiency programs, and for meeting the requirements of this order. Each senior agency official designated by an agency shall be responsible for:

(a) preparing an agency strategy for meeting the goals of this order, in accordance with guidance issued by DOE;

(b) submitting the agency strategy to DOE within 180 days of the issuance of this order for evaluation and submission to OMB;

(c) implementing the data collection and reporting system outlined in the DOE guidance for collecting annual agency performance data on meeting the goals of this order and reporting the data to DOE;

(d) ensuring the agency's strategy for meeting the goals of this order is incorporated in the annual budget submission to OMB; and

(e) assembling the appropriate team and resources in the agency necessary to attain the goals of this order.

**Sec. 303. Management and Government Performance.** Agencies may use the following management strategies to assist them in meeting the goals of this order:

(a) **Awards.** Agencies may use employee incentive programs to reward exceptional performance in implementing this order.

(a) **Performance Evaluations.** Agencies shall, where appropriate, include successful implementation of the provisions of this order in the position descriptions and performance evaluations of agency heads, the senior official, fleet managers, their superiors, and other relevant employees.

**Sec. 304. Applicability.** This order applies to each agency operating 20 or more motor vehicles within the United States. Agency means an executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.

**Sec. 401. Vehicle Reporting Credits.** When preparing the annual report to DOE and OMB, each agency acquisition of an alternative fuel light-duty vehicle, regardless of geographic placement, shall count as one credit towards fulfilling the AFV acquisition requirements of the Energy Policy Act of 1992. Agencies shall receive one additional credit for each light-duty AFV that exclusively uses an alternative fuel and for each Zero Emission Vehicle of any size. Agencies shall receive three credits for dedicated medium-duty AFVs and four credits for dedicated heavy-duty AFVs. Agencies can also receive one credit for every 450 gallons of pure bio-diesel used in diesel vehicles.

**Sec. 402. Infrastructure.** To support the use of alternative fuel in AFVs, agencies should arrange for fueling at commercial facilities that offer alternative fuels for sale to the public.

(a) Agencies should team with State, local, and private entities to support the expansion and use of public access alternative fuel refueling stations;

(b) Agencies should use the authority granted to them in section 304 of the Energy Policy Act of 1992 to establish nonpublic access alternative fuel infrastructure for fueling Federal AFVs where public fueling is unavailable.

(c) Agencies are encouraged to work with DOE and GSA to resolve alternative fuel usage tracking issues with alternative and petroleum fuel providers.

**Sec. 403. Procurement of Environmentally Preferable Motor Vehicle Products.**

(a) Consistent with Executive Order 13101 and section 6002 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6962, effective 6 months after the date of this order, no Federal agency shall purchase, sell, or arrange for the purchase of virgin petroleum motor vehicle lubricating oils when re-refined motor vehicle lubricating oils are reasonably available and meet the vehicle manufacturer's recommended performance standards.

(b) Consistent with Executive Order 13101 and RCRA section 6962, in acquiring and maintaining motor vehicles, agencies shall acquire and use United States EPA-designated Comprehensive Procurement Guideline items, including but not limited to retread tires, when such products are reasonably available and meet applicable performance standards. In addition, Federal agencies should consider acquiring other recycled content products, such as tires containing a minimum of 5-10 percent post-consumer recovered rubber.

(c) Consistent with Executive Order 13101, Federal agencies are encouraged to use biobased motor vehicle products when such products are reasonably available and meet applicable performance standards.

**Sec. 501. Revocation.** Executive Order 13031 of December 13, 1996, is revoked.

**Sec. 502. Statutory Authority.** Agencies must carry out the provisions of this order to the extent consistent with their statutory authority.

**Sec. 503. Limitations.** This order is intended only to improve the internal management of the executive branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person.

**Sec. 504. Independent Agencies.** Independent agencies and agencies excepted from coverage by section 304 are encouraged to comply with the provisions of this order.

Sec. 505. Government-Owned Contractor-Operated Vehicles. Agencies must ensure that all Government-owned contractor-operated vehicles comply with all applicable goals and other requirements of this order and that these goals and requirements are incorporated into each contractor's management contract.

Sec. 506. Exemptions for Military Tactical, Law Enforcement, and Emergency Vehicles. Department of Defense military tactical vehicles are exempt from this order. Law enforcement, emergency, and any other vehicle class or type determined by OMB, in consultation with DOE, are exempted from this order's requirements for Federal fleet fuel efficiency and alternative fuel vehicle acquisition. Agencies claiming vehicle exemptions must provide information on the number of each class or type of vehicle claimed as exempt as well as an estimate of total fuel consumption of exempt vehicles on an annual basis. Agencies should examine options for increasing fuel efficiency in these exempt vehicles and should report actions taken to increase fuel efficiency in these vehicles or fleets. All information required by this section must be submitted annually under Part 3 of this order.

Sec. 507. Compliance. (a) If an agency fails to meet requirements of the Energy Policy Act of 1992 or this order, its report to the DOE and OMB under section 302(c) must include an explanation for such failure and an updated strategy for achieving compliance using the agency's current and requested budgets.

(b) OMB, in consultation with DOE, may modify the compliance requirements for an agency under Part 2 of this order, if the agency is unable to comply with the requirements of that part. An agency requesting modification must show that it has made substantial good faith efforts to comply with that part. The availability and costs of alternative fuels and AFVs can be a factor in OMB's decision to modify the agency's compliance with Part 2 of this order.

Sec. 508. Definitions. Terms used in this order shall have the same definitions as those in the Energy Policy Act of 1992 and Executive Order 13101, unless specifically changed in guidance to be issued by DOE under section 301(b) of this order.

WILLIAM J. CLINTON  
THE WHITE HOUSE,  
April 21, 2000.