

## MEMORANDUM OF UNDERSTANDING BETWEEN

The Executive Office of the President  
Department of Agriculture  
Department of Defense  
Department of Energy  
Department of Health and Human Services  
Department of Homeland Security  
Department of the Interior  
Department of Justice  
Department of Transportation  
Department of Veterans Affairs  
Environmental Protection Agency  
General Services Administration

**TITLE:** Promoting Sustainable Environmental Stewardship<sup>1</sup> of Federal Electronic Assets

**PURPOSE:** The Executive Office of the President, Department of Agriculture, Department of Defense, Department of Energy, Department of Health and Human Services, Department of Homeland Security, Department of the Interior, Department of Justice, Department of Transportation, Department of Veterans Affairs, Environmental Protection Agency, and General Services Administration (the Parties), wish to enter into this Memorandum of Understanding (MOU) to develop and promote common strategies for using environmentally sustainable technologies and practices to improve the quality, performance, and environmental management of Federal electronic assets throughout their life cycle. Electronic assets covered by this MOU include, but are not limited to, equipment used in communications, information systems, military, and scientific applications. The Parties define the life cycle of electronic equipment broadly to include acquisition, design, manufacture, assembly, distribution, use, reuse, demanufacture, and recycling. The Parties also intend to capitalize on other applicable efforts, including work already underway by the Federal Electronic Challenge (FEC).

**BACKGROUND:** Electronic waste encompasses a broad and growing range of electronic devices ranging from televisions and cellular phones, VCR and DVD players, to personal computers. Currently, electronic waste makes up approximately five percent of the U.S. municipal solid waste stream, and is the fastest growing category of the municipal solid waste stream.

The U.S. Environmental Protection Agency (EPA) estimated that, in 1997, more than 3.2 million tons of electronic waste went into U.S. landfills. Experts estimate that by 2005, the number could reach more than 12 million tons. In 1999, the National Safety Council reported that only 11 percent of all discarded computers were recycled. Furthermore, by 2007, the number of stockpiled obsolete and unused personal computers is expected to reach nearly 500 million.

In addition to the volume of waste generated, the volume of hazardous chemicals associated with the electronics waste is also a materials management concern.

By law, executive order, and regulation, the Federal government is obligated to consider the environmental impacts of its purchasing decisions.<sup>2</sup> In particular, Federal agencies must favor the acquisition of environmentally preferable and energy-efficient equipment and services, and reduce or eliminate the generation of hazardous waste. In addition, pursuant to Executive Order 12999,<sup>3</sup> Federal agencies must offer to donate excess computers and related equipment to needy schools.

The Federal Government is the largest purchaser of electronics in the world. The Information Technology (IT) budget for FY 2003 alone was \$54.2 billion. The majority of the 1.8 million Federal employees have a personal computer. For an average three-year life cycle, the Government discards approximately 10,000 computers each week.

In 2000, several Federal agencies, including the US Postal Service (USPS), the Department of Defense (DOD), the Department of Energy (DOE), the Department of Interior (DOI), the Environmental Protection Agency (EPA) and the White House Council on Environmental Quality (CEQ), signed a Federal Memorandum of Understanding (MOU) to improve the environmental management of their electronic assets. The participating agencies developed an Action Plan to design a government-wide strategy to:

- Increase the demand for greener electronics,
- Promote Best Management Practices within the Federal community,
- Reduce the economic and environmental life cycle cost of electronics,
- Encourage the growth of the infrastructure for reuse, demanufacturing and recycling of obsolete equipment, and
- Recognize individuals and organizations within the Federal community for promoting electronic stewardship.

In 2002, the Office of the Federal Environmental Executive (OFFE) and EPA created the Federal Electronics Challenge (FEC) in response to the main goals and action items of the MOU Action

Plan. The FEC is a purchasing, use, and end-of-life management challenge issued for Federal facilities or agencies to purchase electronic assets in an environmentally sound manner, network with other agencies to improve current practices, and recognize individuals and organizations for their electronic stewardship efforts.

The Federal government's size and buying power uniquely position Federal agencies to drive the design of environmentally sustainable and energy efficient electronic equipment, and the development of a cost-effective national reuse and recycling infrastructure for surplus electronic equipment. More sustainable Federal government electronics purchasing and management practices will help reduce toxics and solid waste, and set a good example for the private sector, state and local governments. It will also save the Federal government millions of dollars annually through reduced and avoided waste management costs and recovery of investment in valuable assets. The scope of this problem, however, dictates a more collaborative effort focused on common objectives.

**GOAL AND OBJECTIVES:** The Parties to this MOU collaboratively seek to reduce the environmental impact of their electronic equipment purchase, use, and disposal through continuous improvements to the acquisition, design, specifications, material choices, distribution, use of new electronic equipment, and the reuse, demanufacturing, and recycling of surplus electronic equipment. In support of this goal, the Parties agree to collaborate on the following five objectives:

1. Increase demand for more energy efficient and environmentally sustainable electronic equipment that is cost effective, while maintaining or improving equipment quality and performance. This could include procuring equipment with reduced toxic content, greater energy efficiency, and increased reused and recycled content, as well as equipment that is designed to be more readily disassembled and recovered at end of life;
2. Promote the implementation of best life cycle management practices for electronic equipment and share identified best practices with those outside of the Federal government;
3. Reduce the economic and environmental life cycle costs of Federal electronic equipment;
4. Promote growth of the market and infrastructure for the reuse, demanufacturing, and recycling of obsolete electronic equipment;
5. Coordinate and cooperate on other public and private sector efforts aimed at achieving similar objectives.

**AGREEMENTS/RESPONSIBILITIES:** This MOU focuses on continuous interaction of the Parties with a free flow of information, and on joint and individual activities aimed at improving life cycle management practices of electronic equipment. Providing information to assure the Parties are fully aware of each other's activities is also essential.

To achieve the MOU goal and objectives, the Parties agree to coordinate plans and programs concerning the life cycle management of electronic equipment through collaborative activities, which may include:

- Providing a forum for understanding pertinent technological and scientific issues, and for understanding existing and proposed policies, regulations, and legislation, and for suggesting improvements thereto;
- Developing sustainable principles for the life cycle management of electronic equipment;
- Identifying and disseminating information;

- Using best life cycle management practices;
- Identifying and promoting processes and procedures that enhance both the energy efficiency and environmental sustainability, as well as the general quality, cost effectiveness, and performance of electronic equipment;
- Developing procurement language to promote the acquisition of energy efficient and environmentally sustainable equipment;
- Improving standards and specifications for the environmental attributes of the equipment, as well as end-of-life services;
- Promoting the use of hazardous and toxic materials substitutes in electronic components;
- Promoting an increase of reused/recycled content in electronic equipment;
- Promoting improvements in the demanufacturing processes;
- Identifying surplus equipment reuse and recycling applications;
- Developing procurement language for demanufacturing contracts;
- Participating in industry meetings and programs to promote the MOU's goal and objectives;
- Coordinating with applicable non-governmental projects and initiatives;
- Organizing seminars and meetings;
- Participating in demonstration and pilot projects; and,
- Documenting the success of the MOU projects and initiatives and the overall success of the partnership.

**ACTIONS:** The Parties agree they will share responsibility for fulfilling the goal and objectives of this MOU. In addition, the Parties agree to:

- Designate, within 30 days of the Parties signing this MOU, a staff-level point of contact (POC) to participate in a Federal Electronics Stewardship Working Group (FESWG), which will coordinate all MOU implementation efforts and provide a forum for information exchange concerning existing and planned initiatives to improve life cycle management practices for Federal electronic equipment;

- Become an Agency partner in the Federal Electronics Challenge (FEC) and actively sponsor participation of all facilities within each Agency;
- Develop within 90 days of the signing of this MOU, an Action Plan detailing the steps the parties will take to promote the MOU goal and objectives;
- Use, as appropriate, ongoing or planned initiatives to achieve MOU goal and objectives; and,
- Seek public and public/private partnership opportunities to support MOU goal and objectives.

**BENEFITS:** This MOU provides the Federal government an excellent opportunity to demonstrate its commitment to environmental stewardship and to lead by example. The parties anticipate substantial benefits from better environmental management of electronic equipment throughout the life cycle, including:

- Reduced use and disposal of hazardous materials, and reduced solid waste from the manufacture and disposition of electronic equipment;
- Electronic equipment that is easier and less costly to demanufacture and recycle;
- Increased recovery and use of reusable components and recyclable materials from electronic equipment;
- Reduced use of virgin materials in the manufacture of new electronic equipment;
- Greater energy efficiency in the manufacture and use of electronic equipment;
- Reduced environmental liability from the handling and disposal of electronic equipment; and,
- Reduced Federal government electronic equipment life cycle costs.

**GENERAL:** The Parties mutually recognize and acknowledge that MOU implementation will be subject to resource availability. This MOU sets forth mutual goals and approaches. It is not intended to create any rights, benefits, or trust responsibilities, either substantive or procedural, nor is it enforceable at law by a party against the U.S., its agencies, its officers, or any other person. Details regarding commitment of agency resources, if any, will be developed in the proposed Action Plan. News releases, media events, conferences, or other public events held to publicize achievements of this effort will be conducted with the prior consent or agreement of the Parties.

Collaboration under this MOU will be in accordance with applicable statutes and regulations governing the respective Parties. Nothing in this MOU is intended to affect existing obligations

or other agreements or arrangements of the Parties. Release of information developed under this MOU will be by prior agreement of the Parties. To ensure all Parties are aware of opportunities to maximize collaboration, advance notification of significant contracts or solicitations relating to the objectives of this MOU should be made to all Parties to the extent allowed by applicable statute and regulation.

The Parties envision that other Federal agencies may wish to join this MOU. The Parties encourage all Federal agencies that support the MOU goal and objectives to do so.

**EFFECTIVE PERIOD:** This MOU will become effective upon the latest date of signature. It shall remain in effect for five (5) years unless otherwise modified or terminated. Any party may withdraw upon 90 days written notification to the others. This MOU can be modified through mutual written agreement among the Parties.

**ADMINISTRATION:** The POCs of the signatory Parties will meet monthly, or as appropriate, as a Federal Electronics Stewardship Working Group (FESWG), to coordinate efforts to implement this MOU and to exchange information concerning existing and planned initiatives to improve Federal electronic equipment management. During the first year, the Office of the Federal Environmental Executive POC will serve as the Chair of the FESWG. Thereafter, the Chair may change as decided by the membership of the FESWG.

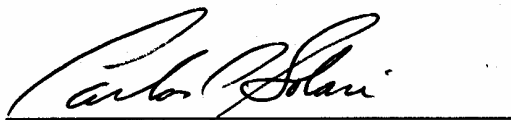
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1. *Sustainable Environmental Stewardship is defined to include those concepts, strategies, tools, practices, and approaches that lead to environmental improvement in a manner that is sustainable over time; considers the long term effects as well as the shorter term, more immediate effect; and that contribute positively, even if indirectly, to the social and economic condition.*

2. *Resource Conservation and Recovery Act (P.L. 94-580, as amended), Energy Policy Act of 1992 (P.L. 102-486, as amended), Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (P.L. 96-510, as amended), Emergency Planning and Community Right-To-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act, P.L. 99-499, as amended), Pollution Prevention Act of 1990 (P.L. 101-508, as amended), Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," Executive Order 13123, "Greening the Government Through Efficient Energy Management," Executive Order 13148, "Greening the Government Through Leadership in Environmental Management," and Federal Acquisition Regulation.*

3. *Executive Order 12999, "Educational Technology: Ensuring Opportunity for All Children in the Next Century."*

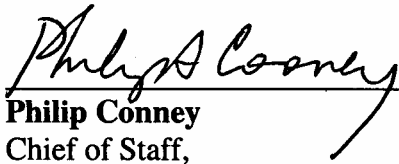
**SIGNED BY:**



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11-15-04

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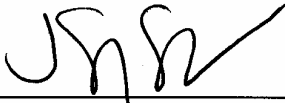
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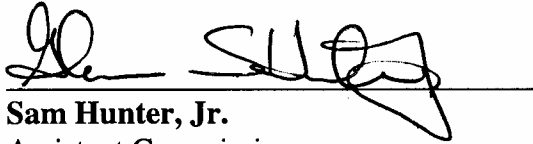
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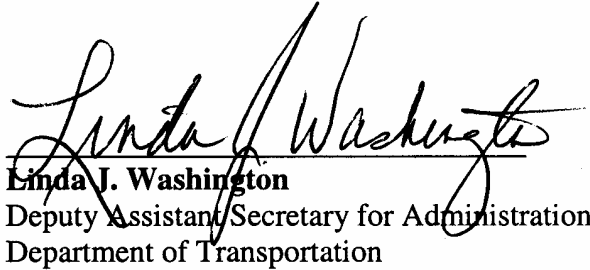
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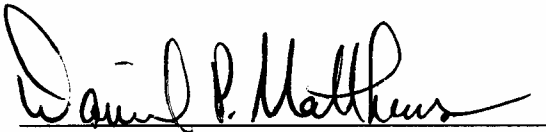
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