Ames Procedural Requirements

APR 8800.3

Revised Date: New Chapter

COMPLIANCE IS MANDATORY

Chapter 29 - Sustainability

Table of Contents

29.1 Applicability

This instruction applies to all civil servants, contractor employees, resident agency personnel, and partners at Ames Research Center and Crows Landing Flight Facility (ARC).

[Back to Table of Contents]

29.2 Purpose

This chapter describes and establishes the requirements of Ames' Sustainability program.

[Back to Table of Contents]

29.3 Policy

1. Facility projects planned, designed and constructed under NASA AmesÕ authority or control shall incorporate sustainable design principles to the maximum extent possible to reduce environmental life cycle costs, implement pollution prevention principles, and minimize facility impacts on natural resources while maximizing occupant health, safety, and productivity. All AmesÕ projects are required to be LEED (Leadership in Energy and Environmental Design) certified. NASA projects planned for FY2006 and beyond shall meet the minimum LEED rating of Silver and strive to meet LEED ratings of Gold. Waivers to the minimum LEED ratings shall require Headquarters Code JX approval.
2. Encourage sustainable use of resources in all AmesÕ operations.
3. Encourage environmentally beneficial practices in all AmesÕ operations.
4. Promote employee awareness of sustainability through active information dissemination.

[Back to Table of Contents]

29.4 Authority

All relevant federal, state, and local laws and regulations, Presidential Executive Orders, and NASA Policy pertaining to Sustainability, including, but not limited to:

1. NPD 8820.3 Facility Sustainable Design
2. 42 U.S.C. 8251, et seq, National Energy Conservation Policy Act, as amended by the Energy Policy Act of 1992, Public Law 102-486, 106 Stat. 2776.
3. 42 U.S.C. 6201, et. seq., Energy Policy and Conservation Act.
4. 48 CFR (Federal Acquisition Regulation (FAR) Subpart 23.2, ÒEnergy Conservation.Ó
5. Executive Order 12902 of March 10, 1994, Energy Efficiency and Water Conservation Act.
6. Executive Order 13101, Greening the Government Through Waste Prevention, Recycling and Federal Acquisition, 3 CFR (1998 Compilation).
7. Executive Order 13123, Greening the Government Through Efficient Energy Management, 3 CFR (1999 Compilation).
8. Executive Order 13148, Greening the Government Through Leadership in Environmental Management, 3 CFR, April 21, 2000
9. Executive Memorandum of April 29, 1994, Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds.
10. State and local laws and regulations related to pollution abatement, prevention, and control, as may be applicable to the Federal Government.
11. NPR 8820.2C Facility Project Implementation Handbook.
12. NPR 8570.1 Energy Efficiency and Water Conservation Technologies and Practices
13. NPR 8715.3 NASA Safety Manual
14. NPR 8831.2D Facilities Maintenance Management
15. Pollution Prevention Act of 1990 (42 U.S.C. 13101 et. seq.).
16. NASA Policy Directive 8500.1, NASA Environmental Management.
17. NASA Procedural Requirements, 8820.2, Pollution Prevention.

18. NASA Procedural Requirements, 8830.1, Affirmative Procurement Plan for Environmentally Preferable Products.

[Back to Table of Contents]

29.5 Responsibilities

29.5.1 Center Management

[redacted]

[Back to Table of Contents]

29.5.2 Director, Facilities Engineering and Real Property Management Division, Code PF

[redacted]

[Back to Table of Contents]

29.5.3 Line Management and Contracting Officers Technical Representatives:

[redacted]

[redacted]

[Back to Table of Contents]

29.5.4 All Personnel:

1. Purchase and use products which meet EPAÕs minimum recycled/recovered materials content guidelines.
2. Minimize hazardous and solid waste generation through source reduction and recycling, to the maximum extent practicable. See Appendix C and Comprehensive Procurement Guidelines website http://www.epa.cpg/.
3. Recycle cardboard, office paper, toner cartridges, beverage containers, chemicals, batteries, wood and scrap metal appropriately.
4. Strive to conserve energy and water.
5. Use Energy Star products. For more information see Energy Star website at http://www.energystar.gov/products/.
6. Be aware of your impacts to the environment, and try to reduce negative impacts, while increasing positive impacts.
7. Strive to use resources efficiently. Encourage and participate in environmentally beneficial practices.
8. Attend required Sustainability training courses.

[Back to Table of Contents]

29.5.5 Plant Engineering Branch, Code PFP:

[redacted]

[Back to Table of Contents]

29.5.6 Logistics Branch, Code JS:

[redacted]

[Redacted]

[Back to Table of Contents]

29.5.7 Environmental Services Division, Code QE

1. Report to NASA HQ Environmental Management Division (EMD) on Sustainability progress and metrics as requested.
2. Evaluate NASA-wide and Ames' agreements and commitments for inclusion of sustainable practices and principles.
3. Determine sustainability training needs.
4. Conduct sustainability training as necessary at each relevant level and function of the organization.
5. Verify and record that the necessary sustainability training has occurred.
6. Assess Center progress toward achieving sustainable design goals and objectives.
7. Provide Code PF ideas for sustainable design alternatives. Proposed alternatives must include consideration of environmental life cycle cost impacts.
8. Represent NASA in Federal Network for Sustainability (FNS) at www.federalsustainability.org. Actively participate in FNS initiatives.
9. Stay aware of and participate in local and regional sustainability efforts, such as Sustainable Silicon Valley.
10. Coordinate with Code PF on energy efficiency and water conservation projects and initiatives.
11. Coordinate center-wide involvement in Sustainability initiatives such as Federal Electronics Challenge and Sustainable Silicon Valley.
12. Develop life cycle cost analyses for adequately incorporating environmental costs into Center projects.
13. Participate in HQ sustainability VITS and activities.

[Back to Table of Contents]

29.6 Definitions

29.6.1 Affirmative Procurement/ ÔBuying GreenÕ

Affirmative Procurement is the policy and practice of purchasing products made with recycled materials instead of buying competing products without that attribute. Affirmative procurement also includes environmentally preferable purchasing, which is the practice of considering all environmental impacts of a product prior to purchasing, and purchasing those products with the least detrimental impact -- or greatest positive impact-- to the environment.

[Back to Table of Contents]

29.6.2 Composting

Composting uses natural processes to turn organic waste into fertilizer. Organic wastes break down through a combination of biological and chemical processes. Biological agents like worms,

insects, fungi, bacteria and other micro-organisms Òchew upÓ the materials, which are further transformed by oxidation (exposure to air), reduction and hydrolysis (exposure to water).

[Back to Table of Contents]

29.6.3 Continuous Building Commissioning

Continuous building commissioning is a systematic process of ensuring that a building performs in accordance with the design intent, contract documents, and the owner's operational needs throughout the life of the building.

[Back to Table of Contents]

29.6.4 (Environmental) Life Cycle Cost Analyses

Environmental life cycle cost analyses detail the direct and indirect costs of environmental impacts caused by a product or system throughout its entire life cycle.

[Back to Table of Contents]

29.6.5 Federal Electronics Challenge

The U.S. EPAÕs Federal Electronics Challenge (FEC) is a voluntary partnership program that encourages federal facilities and agencies to:

- Purchase greener electronic products,
- Reduce impacts of electronic products during use, and
- Manage obsolete electronics in an environmentally safe way.

For more information see the FEC web page: http://www.federalelectronicschallenge.net.

[Back to Table of Contents]

29.6.6 Federal Network for Sustainability (FNS)

The Federal Network for Sustainability is a voluntary, collaborative network of Federal agencies in the Western United States focused on fostering and furthering the concept of sustainability within the government through agency programs and group initiatives. For more information see FNS website at http://www.federalsustainability.org.

[Back to Table of Contents]

29.6.7 Green Product

An environmentally preferable product. A product with less detrimental impact on the environment. Includes least toxic, recyclable, reusable, recycled-content, locally-produced, low-polluting, long life-cycle, harvested on a sustained yield basis and biobased.

[Back to Table of Contents]

29.6.8 Green Tags

Green tags are a kind of currency used in the energy trade to represent the environmental and social benefits of renewable generation. Green tags are also sometimes called tradable renewable energy certificates or renewable energy credits.

Green tags provide a way to buy and sell the environmental attributes of renewable generation separately from the electricity generated. This is useful because the availability of the electricity is constrained by the location of the generating facility. But since green tags are a currency, they can easily be traded over hundreds of miles. Green tags make it possible for anyone, anywhere to purchase the benefits of renewable energy.

[Back to Table of Contents]

29.6.9 Integrated Pest Management (IPM) /Integrated Vegetation Management (IVM)

IPM and IVM are sustainable approaches to pest and vegetation management that combine biological, cultural, physical, and chemical tools to minimize economic, health and environmental risks.

[Back to Table of Contents]

29.6.10 (U.S. EPAÕs) Labs for the 21st Century

U.S. EPAÕs Labs 21 program promotes sustainable design and operation of laboratories.

[Back to Table of Contents]

29.6.11 LEED (Leadership in Energy and Environmental Design)

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System¨ is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution. For more information see LEED website at https://www.usgbc.org.

[Back to Table of Contents]

29.6.12 Sustainability

Term used to describe humanityÕs desire to sustain economic growth and environmental health for the long term.

[Back to Table of Contents]

29.6.13 Sustainable Design/ ÔGreen BuildingÕ Principles

Call for buildings that are designed, constructed, renovated, operated and reused in a resource and energy efficient manner.

[Back to Table of Contents]

29.6.14 Sustainable Development

Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

[Back to Table of Contents]

29.6.15 Sustainable Silicon Valley

The Sustainable Silicon Valley (SSV) Project is a multi-stakeholder collaborative initiative to produce significant environmental improvement and resource conservation in Silicon Valley through the development and implementation of a regional environmental management system (EMS). For more information see SSV website at http://www.sustainablesiliconvalley.org.

[Back to Table of Contents]

29.6.16 Xeriscape

Xeriscape landscaping incorporates seven basic principles which lead to saving water: planning and design, soil analysis, practical turf areas, appropriate plant selection, efficient irrigation, use of mulches, and appropriate maintenance.

[Back to Table of Contents]

29.7 Sustainability Program Description

29.7.1 Federal Electronics Challenge

NASA Ames Research Center joined the U.S. EPAÕs Federal Electronics Challenge Program in October 2003. Ames submitted a baseline survey that summarizes our current computer disposal practices. Based on this survey, here are the initial goals Ames has set under this program:

1. Reduce existing stockpile of computer equipment maintained by the Ames Property Disposal Office.
2. Identify and begin using off-site facility for recycling and recovering materials from obsolete computer equipment by February 2004. Facility must be permitted to receive and process equipment and ensure that all materials are recovered for reuse and that nothing is sent overseas to secondary markets.
3. Modify donation process to assist receiving organizations with managing their obsolete computer equipment and to minimize liability to NASA for improper handling of donated equipment.

For more information, see http://q/qe/p2/.

[Back to Table of Contents]

29.7.2 Affirmative Procurement

Ames shall comply with affirmative procurement regulations. In doing so, Ames shall procure products that contain recycled content and that are environmentally preferable.

[Back to Table of Contents]

29.7.2.1 Purchasing by AmesÕ employees

All purchases of the items listed in Section 29.7.2.2 shall meet the recovered materials content levels established by the U.S. EPA. Appendix C contains a detailed list of the designated items and the minimum recycled content levels.

Purchasers of any EPA designated item which does not meet minimum recycled and/or recovered materials content must obtain a waiver from the Environmental Office prior to initiating the purchase request. The Request for Waiver must be approved by the Environmental Office prior to acquisition of any non-conforming item. These requirements apply to both government and contractor purchases, in accordance with NPR 8830.1, Affirmative Procurement Plan for Environmentally Preferable Products.

[Back to Table of Contents]

29.7.2.2 EPA Guideline Standards for Recycled Material Purchases

The following categories of items are designated by U.S. EPA as being available with recycled content:

1. paper and paper products
2. non-paper office products
3. vehicular products
4. construction products
5. transportation products
6. park and recreation products
7. landscaping products
8. miscellaneous products

U.S. EPA's recommended recovered materials content levels are specified in Appendix C.

NOTE: Purchases of items through General Services Administration (GSA) Federal Supply ServiceÕs environmental products catalogs will automatically meet U.S. EPA's standards.

[Back to Table of Contents]

29.7.3 Environmental Life Cycle Analyses

Executive Order 13148 ÒGreening the Government through Leadership in Environmental ManagementÓ requires that environmental life cycle and cost accounting be applied to all projects at Ames Research Center.

In order to accomplish this, Code QE has developed a qualitative life cycle assessment checklist (Appendix A). This tool is a first step in meeting the regulatory requirement and ensuring that environmental life cycle costs are taken into consideration during project planning. Code QE has taken, and is taking, further steps to accomplish the intent of the Executive Order. For instance, Code QE has suggested that the PDRI (project definition rating index), a tool utilized by

Facilities Engineering in project planning and execution incorporate the life cycle cost accounting requirement. Code QE has ascertained the relative benefit of software packages such as BEES and ECONOPAK currently in use by Facilities Engineering that meet some aspects of the executive order. Use of LEED by Facilities Engineering also meets some aspects of this executive order. Code QE has also suggested to NASA Headquarters that the agency would benefit from leadership, training, and tools with regard to execution of this executive order. Code QE is currently ascertaining the best use of the qualitative life cycle assessment checklist.

[Back to Table of Contents]

29.7.4 U.S. EPAÕs Performance Track program

NASA Ames Research Center participates in the U.S. EPAÕs Performance Track program. As a part of this program, the Center sets four goals to demonstrate commitment to outstanding environmental stewardship. These goals can be ÔSustainabilityÕ goals. For instance, in 2002 NASA Ames Research Center set a goal to increase its use of 100% recycled paper onsite. This goal was reported to the U.S. EPA as part of the U.S. EPA Performance Track program. This goal was an initiative advanced by the Federal Network for Sustainability, and can be considered a ÔSustainabilityÕ goal Đ the goal advances the principle of Sustainability and is above and beyond compliance or pollution prevention requirements. Other ÔSustainabilityÕ goals reported in the 2002 Performance Track program report are maintaining habitat for the Western Pond Turtle, recycling industrial wastewater and thereby reducing the use of total potable water use, and commitments to better track and reduce center-wide energy use. Code QEÕs goals to report to the U.S. EPAÕs Performance Track program will change every three years.

[Back to Table of Contents]

29.7.5 Sustainable Design

Facility projects planned, designed, and constructed under Agency authority or control shall incorporate sustainable design principles to the maximum extent possible to reduce environmental life cycle costs, implement pollution prevention principles, and minimize facility impacts on natural resources while maximizing occupant health, safety, and productivity. Sustainable design is an overarching concept, incorporating appropriate sustainable design elements into facilities planning, design, construction, operation and maintenance, to enhance and balance facility life cycle cost, environmental impact, and occupant health, safety, security, and productivity.

Sustainable design includes: energy efficiency and water conservation, site selection to minimize environmental and transportation impact and if possible to enhance the environment, use of sustainable materials (e.g. reused, recycled, recyclable, nontoxic, low-embodied energy content, renewable), emphasis on durability and efficiency of materials and equipment, a healthy environment, not limited to indoor air quality, noise control, and natural lighting, features in support of enhanced worker productivity, design for personnel safety and security, design for decommissioning and disposal, enhanced building operation and maintenance characteristics (e.g. Design for Reliability and Maintainability, continued efficiency, and low toxicity); a philosophy that defines integrating operations and maintenance experience into the facility acquisition process (i.e. Maintainable Design), and a philosophy that defines facility operational objectives, then tests and verifies that all building systems and components have been properly installed, are free of latent defects, and will perform to the level intended (i.e. Continuous Building Commissioning).

Sustainable design principles shall be applied to new construction, facility revitalization, and

minor maintenance projects, including repairs, restoration, rehabilitation and modification.

[Back to Table of Contents]

29.7.5.1 Use of LEED

NASA Ames shall evaluate their project results using the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. All AmesÕ projects shall meet the LEED certification requirement. Projects planned for FY2006 and beyond shall meet the minimum LEED rating of Silver and strive to meet LEED rating of Gold. Waivers to the minimum LEED ratings will require Headquarters Code JX approval.

[Back to Table of Contents]

29.7.5.2 U.S. EPAÕs Labs for the 21st Century

Per NPD 8820.3 Facility Sustainable Design, Ames shall achieve the Environmental Protection Agency Laboratories for the 21st century standard. Information on the EPA Labs for the 21st century standard is at http://www.epa.gov/labs21century/.

[Back to Table of Contents]

29.7.6 Participating in Sustainability Initiatives

AmesÕ Environmental Services cooperates with the surrounding communitiesÕ sustainability initiatives in order to advance sustainability in our sector and region.

[Back to Table of Contents]

29.7.6.1 Federal Network for Sustainability

Code QE participates in the following FNS initiatives: Environmental Management Systems, Green Power Procurement, Sustainable Buildings, Greening Federal Copier Paper, Electronic Products Stewardship, and Biodiesel Fuel.

[Back to Table of Contents]

29.7.6.2 Sustainable Silicon Valley

Code QE is an active participant in Sustainable Silicon Valley. Sustainable Silicon Valley chose to focus on two significant environmental issues for the region: energy and water use. The group serves as the nexus for coordinating Silicon Valley organizations to commit to regional reductions in energy and water use.

NASA Ames has committed to a 30% reduction in greenhouse gas emissions by 2010 compared to a 1990 baseline.

Ames is currently participating in formulation of a water use goal for Silicon Valley.

[Back to Table of Contents]

29.7.7 Recycling

Ames recycles paper, cardboard, photocopier toner cartridges, printer toner cartridges, glass, plastic, and aluminum beverage containers, chemicals, and batteries. For specific guidelines and practices, see the Ames Recycling Fact Sheet (Appendix D).

[Back to Table of Contents]

29.7.8 Energy and Water Conservation

Code QE, in concert with federal policy and sustainable building and operations practices, encourages the Center to find ways to conserve energy and water.

[Back to Table of Contents]

29.7.8.1. Energy Conservation

Energy conservation across Center operations is encouraged.

The following are methods used to conserve energy:

- Energy audits
- Energy Savings Performance Contracts (ESPCs)
- Utility Energy Services Contracts (UESCs)
- Use of U.S. EPA Energy Star and other energy efficient products
- Energy Star Building Label
- Sustainable Building Design Practices
- Energy Efficiency Provisions in Building Leases
- Use of Renewable Energy or Green Power (daylighting, passive solar heating, photovoltaics, green tags, directly distributed green power)
- Information Campaigns to encourage Energy Conservation
- Building Recommissioning
- Best Management Practices
- Energy Management Retrofit Projects, and
- Electricity Load Reduction.

The following systems at the Center provide key opportunities for energy savings:

- Integrated Design
- HVAC
- Water Heating
- Lighting
- Office Equipment
- Energy Management and Control Systems
- Electric Motor Systems, and

- Electrical Power Systems.

Code QE shall work actively with Code PF to encourage energy conservation in all operations.

The Center has already pursued many energy conservation measures. These include energy savings performance contracts committing Ames to electricity reductions. This was achieved primarily through using efficient lighting products and occupancy sensors across the Center. Code PFP is committed to energy conservation measures per federal policy. Code PFP has encouraged use of renewable energy sources where reasonable including solar panels and a windmill.

[Back to Table of Contents]

29.7.8.2 Water Conservation

There are a number of strategies that can be employed to reduce the amount of water consumed at Ames. In general terms, these methods include:

- System optimization (i.e., efficient water systems design, leak detection, and repair);
- Water conservation measures; and
- Water reuse/recycling systems.

More specifically, a wide range of technologies and measures can be employed within each of these strategies to save water and associated energy consumption. These include:

- Water-efficient plumbing fixtures (ultra low-flow toilets and urinals, waterless urinals, low-flow and sensored sinks, low-flow showerheads, and water-efficient dishwashers and washing machines)
- Irrigation and landscaping measures (water-efficient irrigation systems, irrigation control systems, low-flow sprinkler heads, water-efficient scheduling practices, and Xeriscape)
- Water recycling or reuse measures (Gray water and process recycling systems)
- Water metering
- Methods to reduce water use in HVAC systems, boilers, steam systems and cooling towers, and
- Public information and educational campaigns.

The measures are commensurate with the U.S. DOE's Federal Energy Management Program's "Guidance to Establish Water Efficiency Improvement Goal for Federal Agencies", which details "Best Management Practices" that all federal facilities must consider for implementation per Executive Order 13123.

Existing water conservation practices at Ames include recycling water at the industrial wastewater treatment facility. On average, 50% of industrial wastewater from the aeronautic facilities is reused onsite.

[Back to Table of Contents]

29.7.8.2.1 Energy Star products

U.S. EPA Energy Star products at http://www.energystar.gov/products/ shall be utilized across the Center where applicable.

ENERGY STAR products use less energy, and are otherwise the same or better than other standard products. To earn the ENERGY STAR designation, these products must meet strict energy efficiency criteria set by the US Environmental Protection Agency and/or the US Department of Energy.

[Back to Table of Contents]

29.7.9 Integrated Pest Management/Integrated Vegetation Management

Through the use of Integrated Pest Management and Integrated Vegetation Management, Ames has reduced the use of pesticides and chemical fertilizer from 4000 gallons in 1998 to 50 gallons per year in 2001. Since this initial reduction, Ames has maintained a minimal use of pesticides and herbicides. Methods used to attain this reduction include use of goats for vegetation control, traps for pest control, and composting for fertilizer.

[Back to Table of Contents]

29.7.10 Other Sustainability Initiatives/Using resources most efficiently

NASA Ames shall participate in additional sector and regional Sustainability initiatives, and complete additional Sustainability projects, as appropriate.

Code QE encourages, for example, in concert with federal policy and sustainable building and operations practices, reuse of construction debris onsite, recycling construction debris, purchasing products locally, improving indoor air quality, reusing building material instead of disposing to landfill, reducing use of products, reusing products, recycling products, conservation of resources, minimizing adverse impacts to natural resources, reducing pollution, and otherwise, designing projects that use onsite resources most effectively while impacting the environment minimally, or even better, enhancing our relationship with the natural world.

[Back to Table of Contents]

29.8 Metrics

The following are metrics to be tracked:

Federal Electronics Challenge

Maintain a FEC ÒSilverÓ rating in 2005.

Achieve a ÒGoldÓ rating in 2006.

Maintain a ÒGoldÓ rating thereafter.

Metric: FEC standard achieved

Sustainable Silicon Valley

Decrease CO2 emissions by 30% by 2010 based on a 1990 baseline.

Metric: % reduction achieved

Affirmative Procurement

Metric: % materials purchased that meet U.S. EPA requirements

LEED

Metric: # of CofF projects evaluated with LEED annually/total # of CofF projects annually

Goal: 100%

Environmental Life Cycle Cost Analyses

Metric: # of CofF projects that utilized environmental life cycle cost analysis annually/total # of CofF projects annually

Goal: 100%

[Back to Table of Contents]

29.9 Sources of Additional Information or Assistance

1. Environmental Services Division [redacted]

[Back to Table of Contents]

29.10 Appendices

Appendix A-Qualitative Life cycle assessment Checklist

CHECKLIST TO ASCERTAIN ENVIRONMENTAL LIFE CYCLE COSTS					
Project Description					
Project Name		**Current Date**			
Project Contact		**Project Start Date**			
Building Number and Location		**Phone Number**			
Issue	**Question**		**Yes**	**No**	**N/A**
Material Usage	Does the project eliminate the use of rare or virgin materials?				
	Does the project utilize materials with the least impact on the environment (recycled-content, least toxic, recyclable, locally-produced, long life cycle, low-polluting, harvested on a sustained yield basis, rapidly renewable)?				
		Recycled-content			
		Least toxic			
		Recyclable			
		Locally-produced			
		Long life cycle			
		Low-polluting			
		Harvested on a sustained yield basis			
		Rapidly renewable			
		Other environmentally preferable. Specify: _____.			
	Are recycled content materials utilized consistent with the EPA's Comprehensive Procurement Guidelines at http://www.epa.gov/cpg/products.htm?				
	Does the project recycle construction/demolition debris?				
Resource Conservation	Does the project minimize energy usage?				
	Does the project utilize energy efficient products and practices?				
	Does the project minimize water usage?				
	Does the project utilize water efficient products and practices?				
	Does the project utilize reused or recycled water rather than potable water?				
	Does the project minimize material usage?				
	Does the project reuse buildings?				
	Does the project minimize the amount of waste produced?				
Local Environmental Impacts	Does the project eliminate or minimize impacts to the local environment (i.e. air, water, land, infrastructure)? See NEPA checklist for specific impacts.				
		Air			
		Water			

[Back to Table of Contents]

Appendix B-Sustainability Award Nomination Form

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035-1000

Ames Pollution Prevention/Sustainability Award Nomination

Print or Type

Name of Nominee (Last, First, MI):		Organization or Company/ Institution:
Position Title:	Telephone:	Mailing Address:
Description of Pollution Prevention Activity/ Project:		
Description of the Benefit Achieved: (i.e. describe waste reduced, emissions reduced, resources conserved, etc.) Give specific details.		
Quantify Results and Associated Cost Savings: (if any)		
Payback Period: (If applicable) This is the amount of time required to receive back funds invested through savings achieved. Show calculations. Attach additional pages if necessary. *Note:* A copy of the nomination will be given to the nominee.		
Name of nominator (please print or type):		
Signature:		
Extension:		Org. Code:
Nomination Deadline: **December 31** Late nominations will not be accepted.		Questions? Call extension [redacted] Return to: P2 Coordinator, [redacted]

QE Telephone: [redacted]

QE FAX: [redacted]

[Back to Table of Contents]

Appenidix-C U.S. EPAÕs CPG List of Recovered Content Products

Go to URL: http://www.epa.gov/epaoswer/non-hw/procure/products.htm

[Back to Table of Contents]

Appendix D- Ames Recycling Fact Sheet

Office Recycling Fact Sheet – Ames Research Center

BATTERIES
Dry cell batteries are collected in areas shown at right. To empty or locate a container or for questions about battery recycling **call** [redacted]

No wet cell batteries.

INK JET CARTRIDGES
Ink jet toner cartridges are collected in some areas. To empty the container **call ext.** [redacted]

PAPER RECYCLING TOTER LOCATIONS

[redacted]

Office Recycling Fact Sheet – Ames Research Center

PAPER (All) All paper, white and colored, is now consolidated in toters. Employees must take their office paper to the toter (locations on back). To empty toter **call** [redacted]

Yes
White paper
Colored paper
Newspaper
Magazines
Junk mail
File folders

[Back to Table of Contents]

Appendix E- Ames Request for Waiver Form

REQUEST FOR WAIVER ("Buy-Recycled" Report)
NASA Ames Research Center

To be completed by Request Originator. Send completed forms to [redacted]

Item purchased from: Store Stock | | Other: _____
(Name supply source)

Project Name: _____
(Name project if purchase was required for a specific project, otherwise write N/A.)

List CPG[1] Item(s) Purchased (e.g. file folders, envelopes, insulation, concrete, motor oil, printer cartridges)	Quantity Purchased	Cost	RC[2] (y/n)

1 EPA's Comprehensive Procurement Guidelines. The CPG specifies products made with recovered materials and the percentage of recovered materials content recommended for each product.
2 Recycled Content. (y) yes, item meets CPG requirements; (n) no, item does not meet standards.

Waiver Justification
If "RC" column is checked "no" for any item above then complete the following:

Items meeting the CPG recycled content levels were **not** purchased because (check all that apply):

_____ Recycled-content product only available at an unreasonable price

_____ Recycled-content product not available within a reasonable time

_____ Use of minimum recycled content standards would result in inadequate competition.

_____ Recycled-content product does not meet quality/performance specifications.

Other explanation (attach any supporting documentation to form)

_____ _____ _____
Request Originator Name (print) *Organization* *Date*

_____
Signature of Request Originator

Do not write in box below

_____ _____
Approval Signature of Environmental Program Manager or Designee Date

Send completed forms to [redacted] *for approval.* Rev.2 10/22/03

[Back to Table of Contents]