

## **Secretary of Defense Environmental Award Category Sustainability - Team**

### **Introduction**

The Missile Defense Agency (MDA) is a research, development, and acquisition agency within the Department of Defense. Our workforce includes approximately 7,150 personnel (2,359 government, 168 military, 3,172 contractors, and 1,451 other governmental agency staff and contractors) in multiple locations at host Service installations and test ranges across the United States and around the world.

Our mission is to develop, test, and field an integrated, layered, ballistic missile defense system (BMDS) to defend the United States, its deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight. As we develop, test, and field an integrated BMDS, the MDA works closely with the Combatant Commanders (e.g. Pacific Command, Northern Command) who will rely on the system to protect the United States, our forward deployed forces, and our friends and allies from hostile ballistic missile attack.

The MDA is committed to maximizing the mission assurance and cost effectiveness of our management and operations through continuous process improvement. This philosophy is thoroughly embraced within our Environmental Management System (EMS), which serves as the framework for our Environmental Management and Green Procurement Programs.

### **Background**

MDA's Environmental Management Division, led by Mr. Eric Sorrells, is part of the Facilities, Military Construction (MILCON), and Environmental Management Directorate, led by Mr. Martin Duke. It provides environmental management support to the entire agency and specifically to MDA's Environmental Executive and Deputy Director, Mr. John H. James, Jr.

Mr. Sorrells wears many hats as he serves as the "Management Representative" responsible for executing the day-to-day environmental management system activities and managing our Sustainability Integrated Project Team that includes representatives from organizations across the agency. MDA relies heavily on this team to help identify environmental aspects, determine significance, set objectives and targets, implement action plans, and minimize MDA's environmental footprint. Mr. Sorrells also serves as MDA's Green Procurement Program Manager and has primary responsibility for oversight and execution of MDA's green procurement program. His responsibilities include overseeing day-to-day green procurement program development and implementation; developing and implementing action plans within MDA's Environmental Management System; and collecting program data to assess compliance with MDA and OSD policies and goals.

Ms. Karla Jackson is MDA's Acting Deputy for Acquisition and serves as MDA's Deputy Green Procurement Program Manager. She supports the Program Manager and chairs the MDA's GPP sub-working group as part of the overarching sustainability integrated project team. Her responsibilities include facilitating the Green Procurement Program Manager's access to all phases of MDA's acquisition process; assisting in the development and execution of the program's action plans; and assisting in collection of data used to support MDA's sustainability

reports. Mr. Sorrells and Ms. Jackson provide the environmental and acquisition knowledge and expertise required to successfully develop and implement our green procurement program across the MDA, and report metrics to MDA’s Environmental Executive, DoD, and other agencies. We identify the MDA staff responsible for the development and implementation of MDA’s green procurement program and their roles in Table 1.

**Table 1 – MDA’s GPP Sub Working Group Members**

<b>GPP Team Member Name</b>	<b>MDA Office</b>	<b>Primary Role</b>
Eric Sorrells	DPFE	GPP Manager
Karla Jackson	DA	GPP Deputy Manager
Brandi Carrizo	DS	Chief of Staff Editor
Kevin Call	GC	Environmental General Counsel
Pamela Arias	DP	Program Integration / Acquisition Synchronization
Ken Anderson	DPFE	General Engineer
David Fuller	DPFE	Environmental Engineer / EMS
Howard Finkel	DPFE	Environmental Engineer / Policy
Bill Garcia	DPFB	Chief, DPFB Procurement Branch
Claudia Prosser	DPFB	Supply Specialist
Betty McCaulley	DPFE	Environmental Engineer / Policy
Dick Bowman	IC	Electronics Procurement
David McCord	DAP	Acquisition Manager / Policy
Keith Ulrich	DAC	Principal Acquisition Analyst,
Lana Partridge	DPFE	EMS Specialist / Sustainability
Barbara Young	DPFE	Environmental Compliance / Sustainability
Vincent McDade	DA	MDA Acquisition
Sarah Hall	DPFB	Procurement Specialist
Lance Watson	DPFB	Management Analyst
John Massey	DPFB	Procurement Analyst
Jose Acosta	DPFB	Logistics Analyst
Hannah Smith	DPFB	Procurement Analyst
Denise Madry	DPFB	Procurement Analyst
<i>Add names as appropriate</i>		

The MDA is an acquisition agency that is prohibited from owning real property; therefore, we operate as a tenant on host installations and ranges around the world. Although we participate in our host’s recycling and energy management programs, we implement our own environmental management program. As an acquisition agency, we annually purchase some \$8 billion dollars’ worth of goods and services to support the BMDS. Through the implementation of our Environmental Management System, we determined one of our significant environmental aspects to be the purchase of goods and services. As part of our action plan to control and reduce

the potential impacts from MDA activities, our Sustainability Integrated Product Team instituted the green procurement program sub-working group. That group, in turn, developed a green procurement program-specific action plan to focus on measures we could implement to control and reduce potential environmental impacts from the purchase of goods and services.

### **Summary of Accomplishments**

The Green Procurement Program sub-working group comprises environmental and acquisition subject matter experts from across the MDA enterprise and includes logistics, electronics, and purchasing personnel and credit card holders. We determined that a successful program requires many different skill-sets in addition to “environmental” and “acquisition” experts. Our green procurement program sub-working group pulls together these different skill-sets and identifies ways to incorporate green procurement into the fabric of our Agency’s mission. Our team comprises the war fighters that determine requirements; the scientists and engineers that develop and test systems to satisfy the war fighter’s requirements; the facilities engineers that design, build, operate, and maintain our facilities; and our purchasing specialists who ensure everyone has the goods and services we need to do our job.

Leveraging our EMS plan-do-check-act process, the sub-working group prepared an action plan laying out the activities, responsible parties, and timelines for developing our program, including policy, guidance, education, controls, auditing, and feedback to facilitate continuous improvement. The sub-working group met at least quarterly and presented updates to MDA’s overarching SIPT every quarter. Examples of notable accomplishments include:

- Publication of MDA Instruction “Green Procurement and Sustainable Acquisition,” (4700.03-INS), July 31, 2013, which provides the MDA’s policy, roles and responsibilities, and procedures for implementing MDA’s green procurement program to ensure green procurement and sustainable acquisition is integrated into daily operations and in the earliest phases of acquisition activities to minimize the impacts on mission, human health, and the environment, while meeting performance parameters
- Publication of MDA Instruction “Acquisition Management,” (5013.02-INS), August 24, 2013, which requires MDA acquisition strategies to consider compliance with green procurement requirements and notes that, “although procurement of weapon systems are exempt from ‘green’ procurement mandates and guidance; program managers still must consider long-term sustainability and environmental impacts of equipment, weapon systems, and support platforms throughout their lifecycle, especially in the operation, maintenance, and end-of-life phases”
- MDA Instruction “Sustainable Electronics Management Program,” (8400.01-INS), was updated to require default, black and white printing for all network printers, as well as continuing double-sided printing, purchase of Electronic Product Environmental Assessment Tool certified and Energy Star electronics, and enabling energy management features. This update was signed on December 26, 2014
- In FY 2014, more than 95% of MDA’S Information Technology equipment was either Energy Star® certified or Electronic Product Environmental Assessment Tool registered, which resulted in the MDA using significantly less electricity and toxic metals
- In FY 2014, 100% of our IT equipment was configured to transition to sleep mode when not in use, further decreasing the amount of electricity we use

- In FY 2014, the MDA aggressively pursued repurposing and recycling the MDA’s outdated equipment. Specifically, our equipment is either repurposed by donation or recycled through Responsible Recyclers. We also obtained our own equipment to degauss and crush >3,600 hard drives to allow precious metals recovery by DLA. In fact, the MDA received the USEPA’s Mid-Atlantic, 2014 Federal Green Challenge, Innovation Award for our electronic stewardship program
- Publication of MDA Instruction “Facility Operations and Services,” (6015.01), November 13, 2013, requires purchase of green goods and services, resource conservation and recycling, and collection and reuse of office supplies.
- Publication of MDA Manual “Acquisition Plan Development Process,” (5013.14-M), December 17, 2013, requires written acquisition plans to discuss all applicable green procurement, environmental, and energy conservation objectives associated with the acquisition and any environmentally related requirements to be included in solicitations and contracts (such as requiring products that are energy-efficient, water-efficient, bio-based, environmentally preferable, non-ozone depleting, and/or made with recovered materials)
- In FY 2014, the MDA audited 100 internal contract actions and determined that 100% of our contract acquisitions included “green” contract clauses

- MDA’s Executive Director determined that all MDA employees, and not just those involved in acquisition, are required to complete MDA’s Green Procurement Training on an annual basis (September 3, 2014)
- In FY 2014, the members of MDA’s purchasing team purchased \$1,040,656 worth of recyclable, energy efficient, and/or toxin-free products for MDA use. Through their efforts, the MDA purchased more than 46,000 environmentally safe products, ranging from office paper, janitorial cleaners, electronics, transportation, and landscaping products that were competitive in terms of quality, while costing the same or even less than comparable conventional alternatives. Overall, purchases were green 95.9% of the time when a product with green attributes was available; the remaining purchases (4.1%) were for non-green products because the green alternative didn’t meet required specifications, schedule, or cost feasibility



Example of Green Office Products

Percentage of Green Purchases Based on Available Green Products and Services						
$\% \text{ of Green Purchases} = \text{Green} / (\text{Green} + \text{DMS} + \text{DMT} + \text{NCF})$						
Attribute	BY TRANSACTION		BY NUMBER OF PIECES		BY PURCHASE PRICE	
	% of Green Transactions	# of Green Transactions	% of Green Pieces	# of Green Pieces	% of Green Transactions	\$ of Green Transactions
Green	88.12%	2,033	91.64%	46,137	95.87%	\$1,040,656.63
NG-Doesn't Meet Specs. (DMS)	6.63%	153	1.78%	898	2.67%	\$28,968.24
NG-Doesn't Meet Time (DMT)	0.17%	4	0.06%	31	0.01%	\$130.51
NG-Not Cost Feasible (NCF)	5.07%	117	6.52%	3,281	1.45%	\$15,722.86
Total:	100.00%	2,307	100.00%	50,347	100.00%	\$1,085,478.24

- Ms. Pat Rippey, Waste Management Program, US Army Public Health Command (PHC) conducted a review of MDA’s Green Procurement Program August 26-28, 2014, and determined that MDA has the basis for a strong Sustainable Procurement Program that will likely mature to a more effective program when fully implemented. Examples of the auditor’s findings include:
  - Policy and Command Support. Executive Management has consistently supported Green Procurement Programs; and environmental programs in general. The EMS policy statement includes a commitment to use green procurement and technologies where practical to conserve resources, and to “integrate environmental management into daily decision-making and long-term planning throughout the lifecycle of the Agency’s acquisition, mission, activities, and functions.” This includes minimizing the environmental impacts of mission elements such as the BMDS. Executive Management is kept informed of the Green Procurement Program progress. The Executive Director is briefed quarterly; the Director is briefed annually through the EMS Management Review process. In addition, the Executive Director recently endorsed a requirement to make the Green Procurement Program training mandatory for all personnel on an annual basis
  - Planning and Documentation. The documentation developed to implement the Green Procurement Program is thorough and relevant, and gives consideration to all applicable aspects of the program. In particular, MDA Green Procurement and Sustainable Acquisition Instruction (MDA Instruction 4700.03-INS) clearly identifies program responsibilities and procedures, and is appropriately signed by the Executive Director. Documents and plans also adhere to the Sustainable Procurement goals established for Federal agencies, DOD facilities, and the MDA while keeping strategic initiatives aligned with objectives derived from both external and internal drivers
  - Operation and Implementation. There are several examples of positive achievements in MDA’s Sustainable Procurement program, including:
    - Sustainable Buildings and Real Property. As part of the EMS, MDA developed EMP SOP-14, Sustainable Buildings, which establishes procedures to integrate sustainable building design and operational initiatives into the real property acquisition process, to include facility siting, design, construction, operation, maintenance, decommissioning and deconstruction. The SOP also designates responsibilities for ensuring procurements for goods and services include the Agency’s preference for those that reduce consumption of resources or have other green attributes. As a result, the MDA has several Leadership in Energy and Environmental Design (LEED)-certified buildings in its inventory, including the Headquarters building, which is Silver.

- Documentation of Exceptions. The MDA developed an internal form and process to document exceptions invoked in the purchase of designated preferred products. The allowable exceptions include unreasonable price, unsatisfactory performance, and limited availability. MDA Form 65, Documentation of Exceptions, was created to document and track the exceptions used. The form is applicable to both GPC procurements and contract actions
- Contract Deliverables. The MDA recently began requiring contractors to provide deliverables in electronic format rather than paper documents. This was accomplished through an amendment to the Contract Data Requirements List that accompanies contracts with data deliverables. This provides even greater environmental benefits than FAR clause 52.204-4, which requires double-sided printing (and can only be invoked in contracts above the simplified acquisition threshold of \$150,000). The change to the Contract Data Requirements List is a great example of incorporating sustainable preferences into procurement actions that may otherwise have no other green procurement applicability. This action allowed MDA to count more contracts as sustainable and helped achieve the EO 13514 and DOD SSPP goal of conducting 95% of contracts sustainably
- Greening Mission Acquisition. Rather than limit its sustainability initiatives to those related to facilities, the MDA took efforts to integrate Sustainable Procurement into acquisition of weapon systems and mission elements. The MDA proceeded despite the exception in the FAR section 23.104 that allows weapon systems to be excluded from sustainability requirements. Examples where MDA has incorporated Sustainable Procurement considerations into the acquisition process, include:
  - Acquisition Teams Environmental representatives are more often being considered for Acquisition Teams to provide input in the early stages of the process
  - Process Improvements The integration of environmental review in the Comprehensive Acquisition Process (CAP) will advance sustainability considerations and initiatives. The CAP is a newly developed electronic flowchart for procurement actions that clearly identifies the steps, procedures, and responsibilities of the acquisition process and will facilitate the incorporation of green considerations into the workflow when fully implemented
  - Acquisition Plans The Acquisition Plan Development Process (MDA Manual 5013.14-M) requires acquisition planners to discuss all applicable GP, environmental, and energy objectives associated with the acquisition

These initiatives to incorporate Sustainable Procurement into mission acquisition go beyond the regulatory requirements of the FAR and are efforts typically associated with more mature Sustainable Procurement programs.
- Roles and Responsibilities. The MDA personnel seem aware of their Sustainable Procurement responsibilities and appear genuinely interested in participation and compliance. Most noteworthy, the facilities procurement staff is competent and vigilant about substituting green products for items ordered. Several personnel outside of procurement who were interviewed stated that green products were often substituted at the suggestion or direction of the procurement staff  
The MDA organized several sub-working groups under the overall Sustainability IPT; they include groups for teleworking, electronics, green procurement, facility operations,

fleet management and EMS. The sub-working groups are excellent forums for designating responsibilities, soliciting ideas, and addressing obstacles to a successful program

- Facility Procurement. The Velocity procurement system used to procure items for the MDA facilities has multiple features to enable and encourage the purchase of green products. One feature involves tagging environmental attributes to product descriptions, usually using the codes associated with products in the DOD Electronic Mall or GSA Advantage. A procurement official can easily determine whether or not a product is considered green and therefore can suggest an alternative to the buyer. The system was also used to document exceptions for green products not chosen due to price, performance or availability constraints. There were several choices in the system to document the use of an exception, which included “not green – specs”, “not green – time”, and “not cost feasible”
- Checking and Corrective Action The Velocity procurement system is also used to track purchases of green products on an annual basis. The reports show the percentage of green items out of all items purchased. For the reporting period in FY14, over 95% of purchases were green. The Velocity procurement system is an outstanding tool and is used effectively. The MDA also effectively tracks its overall use of sustainable contracts, as required by EO 13514 and the DOD SSPP. Annually, 100 contracts are reviewed for green specifications and provisions/clauses. It should be noted that the DOD SSPP metric specifically allows for the exclusion of acquisition of weapon systems and their components in the data analysis, but the MDA included them since they are within the scope of MDA’s Green Procurement Program and constitute most of their contract actions
- Sustainable Procurement Training The current online Green Procurement Program training class is informative, technically sound, and thorough. It provides the right amount of information, is interactive, and gives excellent explanation of what green procurement is and why it is needed. MDA’s Executive Director accepted the GPP sub-working group’s recommendation that the training be mandatory for everyone as GPP responsibilities are relevant to virtually all employees.

In summary, the broad scope of these accomplishments required the sustained and focused effort of MDA’s GPP sub-working group to successfully implement MDA’s Green Procurement Program. These accomplishments, the majority of which occurred at no real cost, set precedents for the Agency that will help the MDA conserve resources, save money, comply with environmental laws and regulations, and reduce the environmental footprint of our mission activities without compromising the quality of mission support activities. These accomplishments are transferrable to other DoD acquisition agencies and the MDA will provide electronic copies of our Directives and Instructions for use by others upon request. Lastly, the MDA was able to accomplish all of these efforts through a careful strategy of communication, collaboration, and dedication that exemplifies the best of the behaviors critical to the successful completion of a Green Procurement Program review by a 2<sup>nd</sup> Party Auditor. This team richly deserves recognition for their unparalleled dedication to duty, attention to detail, and the wealth of knowledge MDA’s Green Procurement Program sub-working group brings to the MDA’s Environmental Management Program. Their successful integration of sustainable practices into every facet of MDA’s mission resulted in “green” goods and services and a “green” MDA.

