



Washington Headquarters Services
Defense Facilities Directorate

***“Meeting Executive Order 13514
Federal Leadership in Environmental, Energy,
and Economic Performance”***

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E2S2 Symposium & Exhibition, June 14-17, 2010

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Meeting Executive Order (EO) 13514 – Federal Leadership in Environmental, Energy, and Economic Performance

Overview...

- Background of Washington Headquarters Service (WHS)
- Requirements of EO and the WHS Goals/Policies
- Progress and current status in meeting the EO

Washington Headquarters Services (WHS)

- WHS is a field activity of DoD
- WHS personnel contribute to the mission of our Defense customers by managing DoD-wide programs, operations for the Pentagon Reservation and DoD leased facilities in the National Capital Region
- WHS is organizationally aligned under the Director of Administration and Management (DA&M) for the Office of the Secretary of Defense (OSD)
- WHS provides consolidated administrative and operational support to several Defense Agencies, DoD Field Activities, the headquarters and various elements of the military departments
- WHS has approximately 1,200 civilian and military employees and 2,000 contract employees

Washington Headquarters Services (WHS)

- The Pentagon – a building, institution, and symbol – is the headquarters of the United States Department of Defense (DoD) and the world's largest low-rise office building. It is a National Historic Landmark. It presently houses approximately 26,000 military and civilian employees and about 3,000 non-defense support personnel.
 - 6.5M gross square feet of space
 - 5-acre center court
 - Footprint is large enough to accommodate 5 Capitol buildings

In spite of the Pentagon's tremendous size, it takes only seven minutes to walk between any two points of the building because of its unique design



Washington Headquarters Services (WHS)

The Pentagon...

- 7,754 windows
- 77,006 SF of restrooms
- 6,133,248 SF exterior grounds
- ~\$1million/per mth in energy bills
- \$18,000,000 annual budget for custodial contracts
- >\$300,000 spent annually on recycled content products



Washington Headquarters Services (WHS)

What are WHS goals?

- Meet applicable Federal Mandates (i.e., Executive order 13514, EO 13423, EISA 2007, EPAct, etc).
- Continue sustainability integration into Design, Construction and O&M practices (use of LEED for benchmarking purposes and LEED Silver requirement)
- Institute policies to enhance the operation and ensure WHS compliance with environmental regulations, laws, and Executive Orders (EO) and LEED criteria .

Washington Headquarters Services (WHS)

Sustainability Program Purpose

- To integrate sustainability into all standard design, construction and operations at the Pentagon to achieve LEED certification(s) and be a central resource for information and status of green buildings within WHS.
 - ✓ Aid in the high performance operations and alterations of the building through education and technical support
 - ✓ Demonstrate cost savings by using 'green' integrated techniques and products
 - ✓ Incorporate 'green' language into all contracts and everyday procedures (SOPs)

Mr. Rhodes' Commitment (signed 30 Apr 2007):

I am committed to maintaining a safe, healthy, and sustainable environment for WHS employees, customers, contractors, and the public. I am dedicated to making WHS a leader within the Department of Defense in safety and environmental management and will strive for continual improvement in these areas. To this end, I pledge to:

Seek innovative ways to prevent hazards and pollution, minimize energy use, conserve valuable resources, and reduce waste.

EO Requirements and WHS Goals/Policies

- Metro Entrance Facility (MEF) – received “Certified” LEED rating, 2003
- Pentagon Athletic Center (PAC) – received “Certified” LEED rating, 2004
- Remote Deliver Facility (RDF) – received “Certified” LEED rating, 2005
- Pentagon Library Conference Center (PLC2) – received “Silver” LEED rating, 2008
- Wedge 2 – received “Certified” LEED rating, 2007
- Wedge 3 – received “Certified” LEED rating, 2008
- Wedge 4 – received “Silver” LEED rating, 2010
- Wedge 5 – anticipate “Silver” LEED rating, 2011

EO Requirements and WHS Goals/Policies

■ **Greenhouse Gas Emissions**

➤ Requirement:

- ✓ Reduce scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline
- ✓ Reduce agency-wide scope 3 emissions by 2020, relative to a fiscal year 2008 baseline

■ **WHS – GHG Goal**

- Compliance with following federal mandates:
- Reduce GHG emissions both short term and long term
- Practice good environmental stewardship

WHS Current Status in Meeting the EO

Activities & Inventory

- GHG inventory is based on WHS only.

- GHG team is compiled based on subject matter experts for inventory data needed. Inventory reached across many departments/offices.

- GHG Team Members
 - Heating & Refrigeration Plan (HRP) Manager
 - Incinerator Plan Manager
 - Federal Office Building #2 (FOB2), Navy Annex Building Manager
 - Engineering & Technical Services Division (ETSD)
 - SEMB – Environmental Team
 - SEMB – Office of the Pentagon Fire Marshal
 - FEB – Energy Manager
 - Pentagon Building Management Office (PBMO)
 - Programs and Services Division
 - Pentagon Force Protection Agency
 - Acquisition and Personal Service Division
 - Finance and Management Division

WHS Current Status in Meeting the EO

➤ Initiative Purpose

- Compliance with following federal mandates:
 - ✓ EISA 2007
 - ✓ EO 13514 & 13423
 - ✓ DoD SSPP
- Reduce GHG Emissions both short term and long term
- Practice good environmental stewardship

➤ Inventory Status

- Data 98% complete
- Lacking data for employee travel – majority of emissions
- Initial data calculations have been made to assess GHG for WHS
 - ✓ 236,700 metric tons CO₂-eq
 - ✓ 11 metric tons CO₂e per person

WHS Current Status in Meeting the EO

Next Steps...

- Evaluation of inventory for areas of improvement
- Develop report incorporating inventory, areas of improvement and next steps for implementing program
- Develop training for employees, tenants, etc
- Develop page for website dedicated to GHG program

EO Requirements and WHS Goals/Policies

WHS Goals in Energy Management

- Conduct gap analysis current Program
- Develop & implement Energy Management and Monitoring Program
 - Based on initiatives already in the queue, develop an overall program for energy efficiency reductions, best practices in O&M and high performance facility implementation
- Develop & implement metering and sub-metering program
 - Use current Measurement & Verification (M&V) data to provide way ahead for where more metering is needed
 - Establish SOP for review, management, and measurement
- Develop and implement an Energy Conservation Investment Program (ECIP)
 - Develop a short and long term plan for energy initiatives to meet EISA, EO, LEED requirements
 - Submit ECIP requests to maximize funding for energy efficiency initiatives

EO Requirements and WHS Goals/Policies

WHS Goals in Energy Management

- Mission
 - Develop a Safe and Secure place for employees to work and accomplish the mission of the Pentagon. Obtain the goal and objectives
- Objective
 - Net Zero
- Mission
 - LEED EBOM
 - Energy Star Rating 75 or above
 - GHG Reduction
 - Liability and Reliability with Maintainability

EO Requirements and WHS Goals/Policies

Other WHS Goals & status...

- Recycling & Construction Waste Diversion
 - Current goal to meet 40% recycling
 - Continuous improvement- investigating other ways to increase recycling percentage (i.e., single source recycling)
 - Currently meeting 98% CW with renovation
- Chemical and materials reduction
 - Inventory conducted
 - Program plan developed
 - Currently implementation

EO Requirements and WHS Goals/Policies

Other WHS Goals & status...

- Use of environmentally friendly products/materials/services
 - Current janitorial services consist of environmentally friendly products and services (i.e., bamboo mops, bio-based cleaning supplies, chemical free, etc)
 - Implementing pilot for bio-based toner in copiers
 - Researching the use of 'eco-friendly' cafeteria products (i.e., utensils, plates, napkins)

EO Requirements and WHS Goals/Policies

In Conclusion...

- Continuing to develop & implement policy
- Continuous Improvement of programs
- Implementing reduction plan for GHG and carbon footprint
- Use of LEED for benchmarking sustainability

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Thank you!

Any Questions or Comments?

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