



**DEFENSE LOGISTICS AGENCY
HEADQUARTERS MCNAMARA COMPLEX**

INSTALLATION AT FORT BELVOIR

**SECRETARY OF DEFENSE FY 2018-2019 ENVIRONMENTAL AWARD
NOMINATION: INSTALLATION AWARD – ENVIRONMENTAL QUALITY, NON-
INDUSTRIAL**

NARRATIVE

<u>JUDGING CRITERIA</u>	
Program Management [PM]	Technical Merit [TM]
Orientation to Mission [OM]	Transferability [T]
Stakeholder Interaction [SI]	Impact/Outcomes [I/O]

Introduction: The Defense Logistics Agency (DLA) is an agency of the Office of the Secretary of Defense. The DLA Director reports to the Office of the Under Secretary of Defense for Acquisition & Sustainment (A&S) through the Assistant Secretary of Defense for Sustainment (S). DLA provides worldwide logistics support for the missions of the Military Departments and the Unified Combatant Commands under conditions of peace and war. It also provides support to other DoD Components and certain Federal agencies, i.e., Federal Emergency Management Agency, U.S. Forest Service, Department of Homeland Security, foreign governments, international organizations, and others as authorized. The DLA Fort Belvoir Installation Management staff supports the Headquarters, Defense Logistics Agency (DLA) and five other major tenant organizations including the Defense Threat Reduction Agency, Defense Contract Audit Agency (DCAA), and the Defense Technical Information Center (DTIC).

Approximately 6,200 military, civilian and contract employees are assigned to the DLA McNamara Headquarters Complex (HQC). It is a joint military assignment with service members from the United States Army, Marine Corps, Navy and Air Force working alongside DoD civilians and contractors. The 75 acre McNamara HQC is comprised of a 1.2 million square foot Headquarters Office Building that includes, in addition to traditional office space, several secure facilities, a cafeteria, barbershop, fitness center, and two (2) snack bars and a material receiving and handling facility. A Child Development Center (CDC) capable of supporting up to 250 children, parking lots, and roads managed by DLA HQC, Fort Belvoir DLA Installation Management. The DLA HQC Site Directorate consists of 149 Government and over 200 contract employees organized within six (6) Divisions. While the McNamara Complex is a tenant of U.S. Army Fort Belvoir, it has its own DLA Police force that provides security for the complex and its tenants.

Background: “Together Everyone Achieves More”

[PM] While many organizations claim to practice collaborative activities, the DLA HQC has built a **matrixed-based** organization that exemplifies collaboration and cooperative engagement, ensuring all relevant stakeholders are effectively engaged in the process. With an environmental staff comprised of a single environmental engineer [the Environmental Management Representative (EMR)] supporting a complex of over 6,200 employees and contractors, meeting our **zero-findings performance index** in our environmental compliance responsibilities is a result of a high performance team [matrix organization] whose mission is “to minimize our environmental impact and integrate environmental stewardship into our everyday work”.

[I/O] [T] Operating at scale in DLA HQC is a formidable challenge. Size and scope can be significant obstacles, in the absence of either committed leaders or clear vectors guided by principles that provide direction in a dynamic environment. Agility, flexibility, and strength of purpose in our matrixed system at DLA HQC, allow us to achieve our shared intent. Managing relationships horizontally using our Environmental Aspect Champions to ensure substantive involvement with appropriate internal offices, DLA HQC meets and exceeds our environmental compliance responsibilities in accordance with our Host, Fort Belvoir’s Title V; RCRA Subtitles C, D and I; Virginia Pollutant Discharge Elimination System (VPDES) Industrial Stormwater Major and Municipal Separate

Storm Sewer System (MS4) Permits. As a result, DLA HQC has received **Zero Notices of Violations (NOVs)** from Virginia Department of Environmental Quality (DEQ) throughout the performance period.

[SI][TM][OM][T] Following the ISO 14001 standard established in the Environmental Management System (EMS), the EMS Steering Committee Meeting stakeholders identified **14 Significant Environmental Aspects** based on the activities mentioned above. Utilizing the DLA Environmental Aspects Register tool, a broad range database management system for context categorization, hierarchical sorting and statistical analysis of data, the EMS stakeholders evaluated the activities and processes to determine which aspects can have a significant impact on the environment. Weighted values of risk are to the parameters: environmental, regulatory, mission and probability of occurrence for each environmental aspect establishing an overall severity score used to prioritize the significance of the environmental aspects. The Significant Environmental Aspects are reviewed annually and are fully current. Of the 14 Significant Environmental Aspects identified, DLA HQC has established reduction environmental performance goals for **Energy Use, Fleet Petroleum Use and Greenhouse Gas**. The remaining 11 aspects we regularly monitored due to their significance and the implications of their potential impacts. These include, **Air Emissions, Solid Wastes, Hazardous Materials/Chemicals, Construction Demolition, Hazardous Wastes, Sustainable Procurement, Ozone Depleting Substances, Underground Storage Tanks, Recycling, Universal Wastes and Water Consumption**.

The HQC has a very high visibility position, given its location inside the National Capital Region, and is meeting growing challenges and the necessity to demonstrate its ability to meet the mandates of Executive Orders (EO) 13834, Efficient Federal Operations, and the DoD Strategic Sustainability Performance Plan goals and objectives that apply. Facing these challenges, the Site continues to implement and revise, as appropriate, the EMS in order to improve environmental performance; increase employee involvement; reduce liability; continually improve public image of DLA; improve compliance; enhance customer (taxpayers) trust; reduce costs and meet EO and DoD and mandates.

[I/O][TM][PM] The up to date plans for FY18-FY19 we have prepared and executed in support of the EMS architecture and environmental objectives, have exceeded all planned milestones (refer to table 1 below). Specific achievements demonstrating effective program management include FY18 DLA Environmental Headquarters External Review (EPR) **reducing audit findings by 88%** and FY19 Army Environmental Performance Assessment and Assistance System (EPAAS) findings to **zero audit findings**.

Table 1. List of DM-F Fort Belvoir Site Environmental Documents			
No.	Environmental Management Documents		Date
1.	HQC Environmental Policy Statement 2019		May-19
2.	HQC Environmental Management System Guidelines 2019		Feb-19
3.	Environmental Management Representative Designation 2019		Oct-18
4.	Significant Aspect Champion Designation For Energy Use, Water Use, Petroleum Use, Greenhouse Gas, Solid Waste and Yard Waste_2019		Jun-19
5.	McNamara Complex Environmental Assessment 2019		Aug-19
6.	Objectives, Targets and Action Plans - Energy Use, Petroleum Use and Greenhouse Gas 2019		Aug-19
7.	DLA HQC Fort Belvoir Sustainability Plan 2019		Aug-19

[SI][PM][T][OM][I/O] As we look at large and complex organizations, it is easy to assume that there are only a small number of players who materially impact environmental stewardship and this

cannot be further from the truth. A key factor in our success is our organizations' ownership of the EMS. It is through training, integration of environmental management functions with other key organizational processes as well as our partnerships with internal and external mission partners, other agencies and the community (both internal and external) through our robust outreach program. Our EMR and environmental champions are members of and participate in the Agency's Headquarters Staff Sustainability Working Group; Army Fort Belvoir's (Host command) Energy/Environmental Quality Control Committee (E/EQCC); U.S. Fish and Wildlife Service, ecological service Virginia Field Office and Fairfax County Re-leaf society. Our **outreach program** consists of:

- DLA HQC EMS Awareness Training through our Learning Management System [DLA online global training system].
- New Employee Orientation briefs, environmental overview of the EMS.
- Our C•A•R•E•S logo to communicate our director's environmental policy, integrating environment responsibility with the mission.
- A continual series of environmental articles published featuring each letter in our C•A•R•E•S logo.
- Weekly updates posted in the HQC Bulletin with specific guidance on "how to" dispose of recycle materials in addition to what is collected at the recycle centers, such as used printer and toner cartridges, batteries and cardboard.
- Outreach Program Events partnering with our community partners, Fairfax County, our Host command, Fort Belvoir and our employees and contractors include:
 - Earth Day events FY18 and FY19:
 - ❖ In partnership with Fairfax County Re-leaf society for both performance years, DLA HQC distributed nearly 2000 tree saplings, accounting for **90% of Fairfax County distribution goals**.
 - ❖ Earth Day, Child Development Center – "Planting Flowers with Mom and Dad"
 - America Recycles Day events FY18 and FY19:
 - ❖ In FY18 the McNamara Complex highlighted our recycling program through an interactive recycling trivia "Plinko" game and "upcycling" holiday crafts made from 100% recycle materials, engaging employees and contractors throughout multiple organizations.
 - ❖ In FY18 DLA HQC spotlighted our Recycle Heroes, the children of the CDC who submitted over a dozen art projects created from 100% recyclables.
 - DLA HQC Holiday Door Open/House Tour:
 - ❖ FY18 "Sparkle and Shine it's Recycle Time"-- featuring HQC Holiday Crafts made from recycled material
 - ❖ FY19 "Solar Lights and Holiday Delights" -- featuring HQC Sustainability: Energy Use, Petroleum Use and Greenhous Gas Emissions reduction initiatives

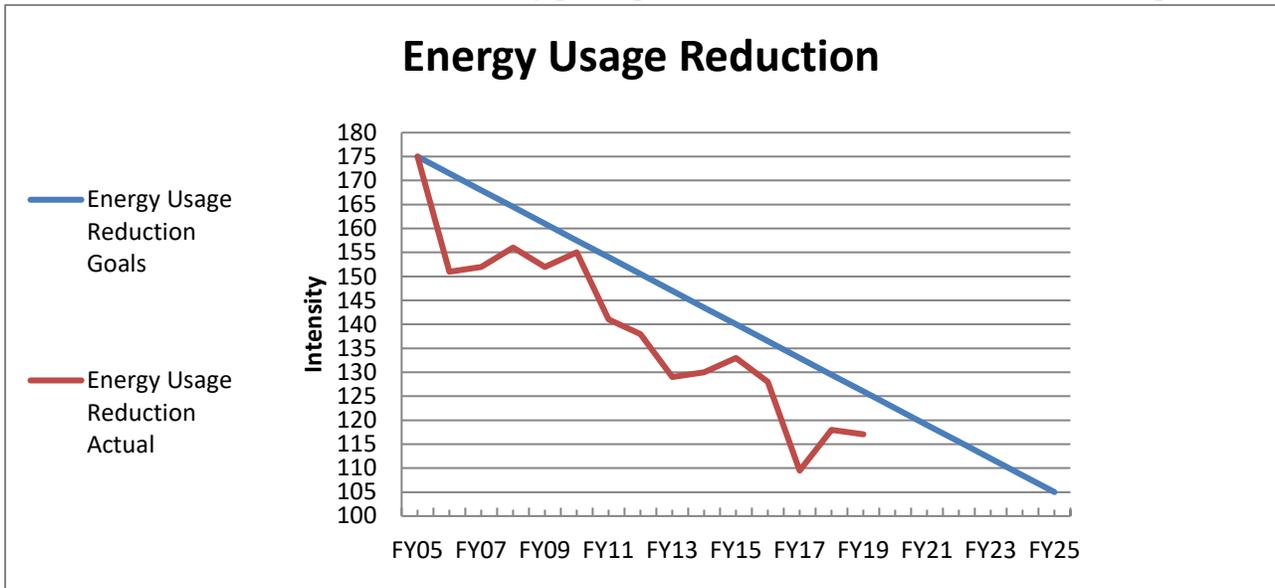


Summary of Accomplishments:

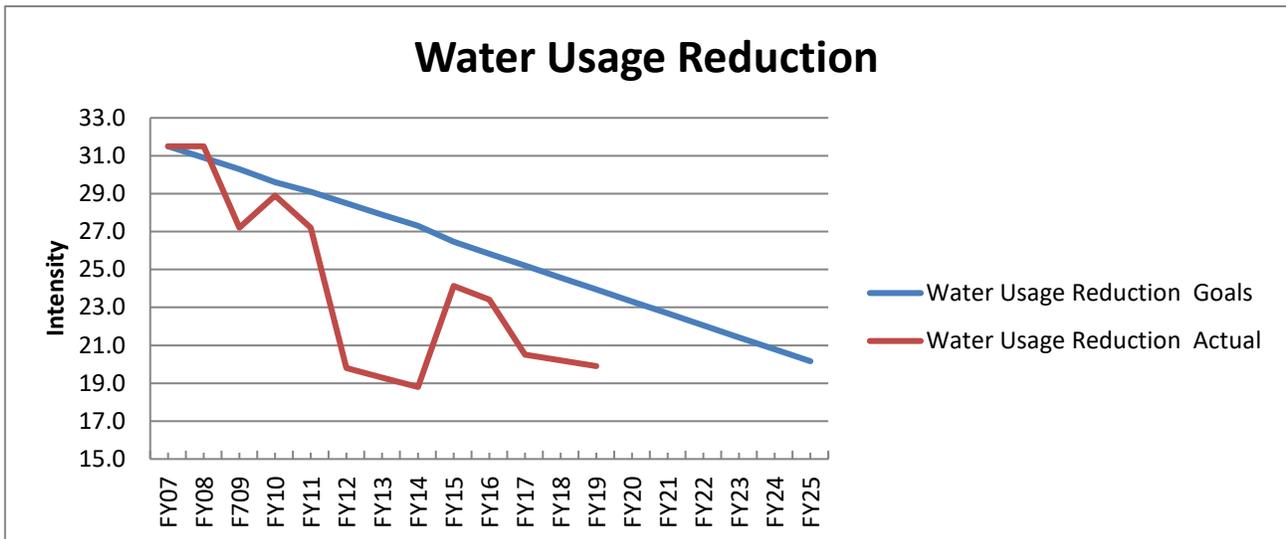
[PM][TM][TOM][VO] **Energy Use and Water Conservation:** Energy use reduction requires a mature strategy that integrates short-term opportunities into longer-term solutions, as technology matures. DLA HQC saw reduction of electrical and gas consumption as a strategic goal in supporting our mission, Warfighter First. The methodological approach of the HQC Energy Resource Manager [Energy and Water Conservation Champion] improved facility energy efficiency while building a culture, normalizing improvements in and expectations of personnel awareness. Core to his strategy is focus on lower cost/higher payoff projects first, allowing a measured approach to more costly solutions, so that opportunities in maturing technology can grow. DLA HQC implemented projects to replace the HVAC and Boilers, saving approximately 41,980 MMBTU per year, representing a **51% reduction** in

MMBTU usage. Additionally, a new heating system for the MRSF will replace the existing system while incorporating solar preheat in FY20.. By incorporating Energy Conservation Measures (ECMs) as “a single initiative undertaken to reduce the energy consumption of a particular piece of equipment or a certain aspect of essential building services,” the HQC Energy Resource Manager has steered an energy use reduction of **33%** over FY18-19 compared to the selected baseline. Meeting the President’s Energy Reduction performance goals, as set for in EO 13834, DLA HQC continues to look for opportunities to improve with planned future ECMs in building energy efficiency and management within the McNamara Complex.

We looked at a future where water intensity per capita needed to continue its downward slope and



realized that this could only be achieved by institutionalizing effective year over year solutions that built upon one another. DLA HQC has consistently exceeded target water reduction goals as previously outlined in EO 13693 (archived) and as mandated in EO 13834 all government agencies achieve 20 percent reduction relative to FY07 and demonstrates annual progress for each fiscal year. The annual potable water intensity reduction for FY18 and FY19 per year goal **far exceeded** the



mandated 20% reduction goal relative to FY07 with an intensity reduction of **36% and 37%** respectively.

[PM] **Fleet Petroleum Reduction:** DLA HQC has optimized our fleet performance by planning both for groundwork changes in fuel services and operator training while right sizing our fleet size and composition, meeting and exceeding performance requirements established in accordance with the Energy Policy Act of 1992 as amended. In line with EO 13834, our five-part method to affect our organization's overall effectiveness is fleet and readiness restructuring; improve fleet efficiency; incorporate new capabilities into our fleet; fleet operator training to modify driver behavior and reduce fuel consumption.

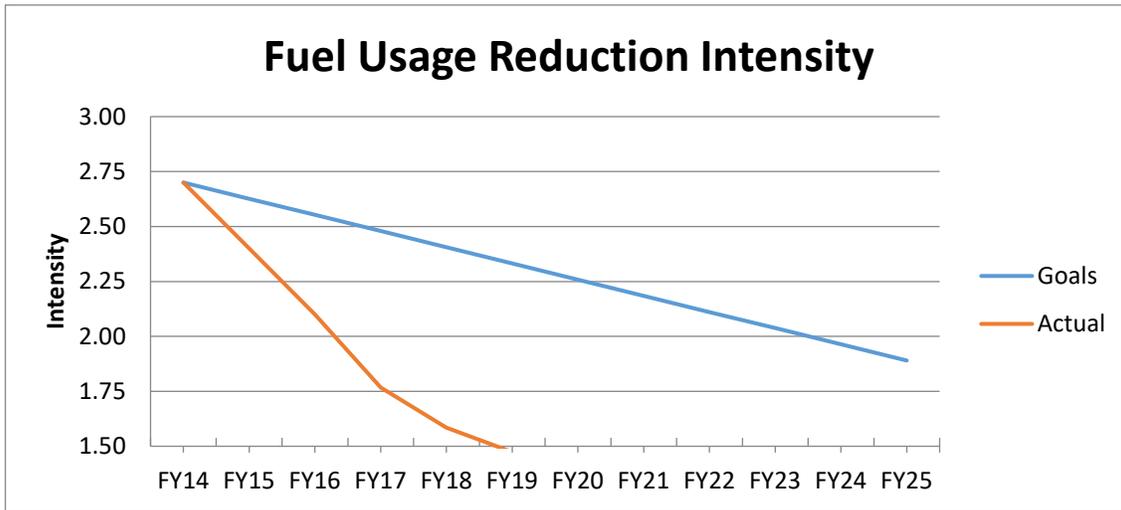
[TM][T][I/O] **Fleet and Readiness Restructuring.** Utilizing Vehicle Allocation Methodology (VAM), the Vehicle Fleet Manager (VFM), incorporated a tiered system for type and capability vehicle availability. This system ensures that those no-fail transportation needs are tiered above other non-critical uses, allowing us to rationalize our vehicle fleet and reduce its size while simultaneously exceeding readiness goals. Using available DLA HQC baseline data (FY05), we have reduced our total number of vehicles approximately **59%** from FY05, right sizing our fleet while reducing our costs with an estimated cost savings of **\$126,000**.

[OM][I/O] **Improve Fleet Efficiency.** Looking more closely at vehicle-to-mission match, DLA HQC has complemented our fleet replacement strategy with automotive construction trends; color and improved material science are improving average vehicle efficiency. Looking for opportunities in procurement our focus on mission needs included driving a reduction in Gross Vehicle Weight through the purchase of light-duty and medium-duty vehicle (LDV) acquisitions. Today, our average vehicle fuel efficiency in class has risen and estimated **79% MPG** since FY05.

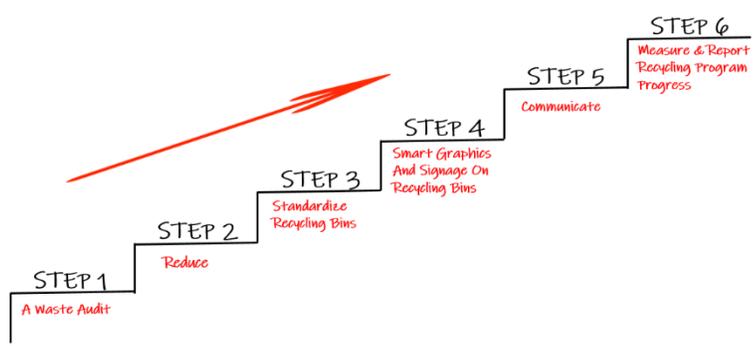
[TM][OM][I/O] **Incorporate New Capabilities into Our Fleet.** As our Petroleum Use Champion, the VFM has changed the vehicle mix reducing our motor vehicle fleet from approximately 100% legacy gas consumers in FY05 to **92% low greenhouse gas (GHG) emitting**, light-duty and medium-duty vehicles in FY19. **Exceeding** the 75% federally directed goal IAW the Energy Policy Act of 1992 as amended and mandated by EO 13834, DLA HQC has set the bar not only for our DoD mission partners, but as a model to follow throughout principal and contributing agencies within the federal government.

[SI][TM][T][I/O] **Fleet Operator Awareness Training.** Aligning deployment of alternative fuel vehicles with fueling infrastructure, DLA HQC has invested heavily in operator awareness training. Factors such as idling vehicles, mission support related decisions (e.g. partial loads, combining trips), making maximum use of locations for renewable fueling pumps within 5 miles or 15 minutes of travel destinations are integral to cost effective operations. An integrated learning program upon vehicle checkout, drivers receive a short training brief to elucidate the importance of these factors and a binder with specific information to that vehicle for proper vehicle use and locations of alternative fueling stations within the designated travel itinerary. Additionally, DLA HQC has installed **two; dual electric charging stations [4 charging ports]**.

[I/O] **Reduce Fuel Consumption.** Comparing fuel consumption from as recent as FY14, DLA HQC has achieved a **41% reduction** of petroleum fuel consumption in FY18 and a **45% reduction** in FY19 **significantly surpassing at an accelerated rate**, the 20% percent petroleum reduction goal set y EO 13834 relative to the mandated baseline FY05.



[S] [PM] [T] Solid Waste: Leveraging our resources with matrixed cross-organizational approach, DLA HQC clearly **exceeded** the federally mandated goal to divert 50% solid waste (non-hazardous) with an estimated **64% and 59%** diversion rate in FY18-19. HQC realized this monumental achievement, championed by our Solid Waste and Construction Waste Champions, and through principled leadership promoting greater environmental accountability by way of innovative and responsible strategies. We reduced reliance on landfills. With a six-step system to waste diversion, DLA HQC waste reduction, reuse, and recycling programs unite our employees and contractors as stakeholders taking ownership in



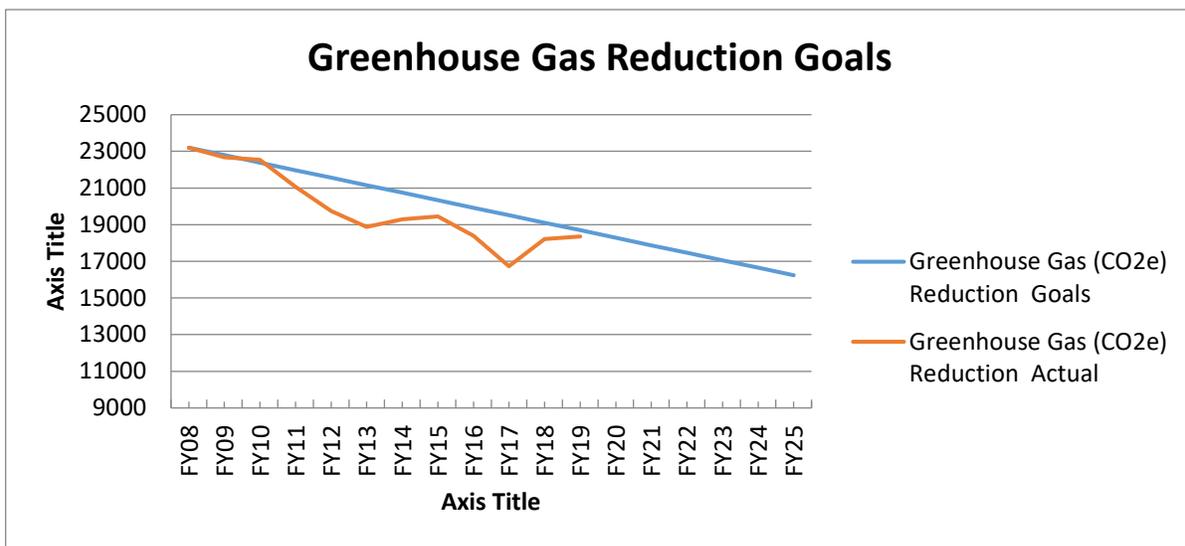
our environmental program. **Step 1: Waste Audit.** Our baseline **waste audit** enabled us to understand where we were in waste management. We saw opportunities for efficiency and targets for operational improvement, resulting in positive environmental and financial impacts. **Step 2: Reduce. Sustainable Procurement** reduced the amount of non-recyclable material brought into the complex, while

increasing the amount and types of material we recycle. Spotlight on our food service contractor, Sodexo is a prime example supporting our effort to divert waste from the landfill by providing recyclable or compostable plates, napkins, containers, compostable garbage liners. **Step 3: Standardized Recycling Bins - Recycling Centers.** With consistent use and implementation of visual standards, we promote a way for our employees and contractors to learn quickly and with ease how to recycle properly. **Step 4: Graphics and signage** displayed throughout the McNamara complex show our employees and contractors what items can be recycled and where to dispose them. **Step 5: Communicate.** From our signs, flyers and posters to publications in our HQC Bulletin, New Employee Orientation, LMS Training, Outreach projects (see above) and our EMS Quarterly Steering Committee Meetings, we create and maintain a culture of getting people passionate about what we are doing and how we are reducing our carbon footprint on the planet. **Step 6: Measure and Report.** Our Quarterly EMS Steering Committee meetings and Annual Leadership Review, facilitates communication by the EMR to our leadership and key advocacy points and environmental champions, priorities back to the organizational nodes represented. This quarterly meeting provides the EMR the opportunity to report the **progress** of our

recycling program as **measured** to the environmental champions and our stakeholders [tenants, employees and contractors] looking at success barriers, and make decisions on progress by identifying opportunities to divert more waste from the landfill.

Solid Waste Reduction at DLA HQC: The Site estimates a total of **1100 tons** of solid waste diverted from the landfill during the performance period. Items recycled include: white paper, newspaper, aluminum, glass, plastic, yard waste, used printer and toner cartridges, cardboard and batteries with a **total** estimated contribution of **\$82,000** to our mission partners/Host QRP.

[S][I][O][M] Greenhouse Gas: Effectively crewing a ship takes a team, and supporting components must function in harmony to reach objectives. Working together our DLA HQC crew excelled within DoD, by beating Greenhouse Gas (GHG) Emission goals outlined in the DoD Strategic Sustainability Performance Plan. GHG reduction required a network of internal and external-to-agency teams in order to produce the results. Collaborating with outside agencies, i.e., Department of Interior, mission partners within DoD (Army, Navy, Marine Corps) and our community, Fairfax County we participated in working groups and ultimately shared best practices, to ensure meeting our challenging goals. Critical to our success, we effectively evaluated Scope 1, 2 and 3 emissions processes and activities, carefully measured, and tracking them. This meant that our fleet operators, industrial services, maintenance, and business operations folks receptivity worked together to sustain reductions in our total GHG footprint. Bottom Line: GHG were reduced by **20% and 21%** over FY18-FY19 compared to baseline FY08 meeting EO 13834 reduction performance goal.



Conclusion: During the award period, DLA HQC demonstrated singularly exceptional leadership in environmental stewardship. Programs in outreach, training, stakeholder engagement, internal and external collaboration, and site leadership all supported remarkable results effectively reducing **\$403,000** in environmental costs over the performance period. Examples of this superior performance run the gamut from sapling delivery to gas efficiency improvements and infrastructure alignment. DLA HQC achieved significant improvement in mission accomplishment, protection of human health in the areas of environmental planning, waste management, and compliance with environmental laws and regulations. Using the EMS, DLA HQC has demonstrated how a small operational unit achieved large-scale, high efficiency results administering environmental aspects of the mission, through a matrix architecture highlighted by open communication, close cooperation, and a supportive culture.