DEFENSE LOGISTICS AGENCY

HEADQUARTERS MCNAMARA COMPLEX

INSTALLATION AT FORT BELVOIR

SECRETARY OF DEFENSE FY 2015-2016 ENVIRONMENTAL AWARD NOMINATION: INSTALLATION AWARD – SUSTAINABILITY, NON-INDUSTRIAL

FY15-16 SECDEF ENVIRONMENTAL AWARD NOMINATION

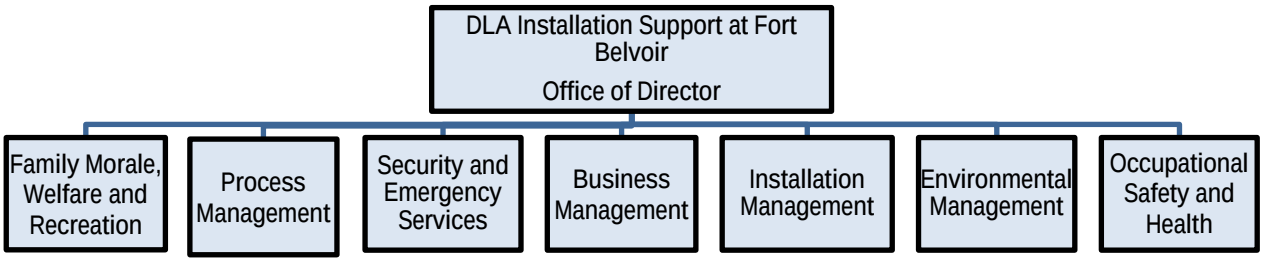
NARRATIVE

This packet narrative is for the Fiscal Year 2015-2016 Secretary of Defense Environmental Award Nomination for the Defense Logistics Agency (DLA) McNamara Complex, Fort Belvoir.

Installation Mission: DLA is an agency of the Office of the Secretary of Defense. The DLA Director reports to the Under Secretary of Defense for Acquisition, Technology and Logistics through the Deputy Under Secretary of Defense (Logistics and Materiel Readiness). The Installation Support staff supports the Headquarters, Defense Logistics Agency (DLA) and four other major tenant organizations including the Defense Threat Reduction Agency (DTRA), Defense Contract Audit Agency (DCAA), Defense Contract Management Agency (DCMA), and the Defense Technical Information Center (DTIC). 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, foreign governments, international organizations, and others as authorized.

DLA Installation Support at Fort Belvoir: Approximately 6,200 military, civilian and contract employees work at 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 McNamara HQC is comprised of over 1.2 million square feet that includes, in addition to traditional office space, several secure facilities, a cafeteria, barbershop, fitness center, and two (2) snack bars. While the McNamara Complex is a tenant on the U.S. Army's Fort Belvoir reservation, all security on HQC is provided by the DLA Police force.

The Complex's facilities include a 1.2 million square foot Headquarters Office Building, a Child Development Center (CD) capable of supporting up to 300 children, a material receiving and handling facility, parking lots, and roads managed by DLA Installation Support at Fort Belvoir staff. The DLA HQC Site Directorate consists of 149 Government and over 200 contract employees organized within six (6) Divisions as shown below:



Site Operations and Installation Management: The responsibilities for HQC environmental regulatory compliance, sustainability, stewardship, and the environmental management system

(EMS) reside within the Site Operations Division. The environmental team consists of one government engineer and one contractor dedicated to ensuring that HQC remains in compliance with all Federal, state and Fort Belvoir environmental laws, regulations and directives in order to promote individual education and stewardship, foster environmental excellence and conform to its environmental management system. The Site Director is also responsible for ensuring that all HQC activities and their environmental impacts meet the 2015 and 2016 DoD Strategic Sustainability Performance Plan goals and all DLA environmental policies. Within the DLA Installation Support structure, the Site Operations and Installation Management divisions manage the activities that have potential environmental impacts as well as activities that may impact the Host's (Fort Belvoir) environmental permits. These activities include GSA fleet management, leased space management within the National Capital Region (NCR), warehousing, official mail, material receiving and screening services, facilities maintenance, landscaping, plumbing, electrical, heating and ventilating, recycling, custodial services, snow removal and cafeteria services.

Environmental Significant Aspects: Based on the activities mentioned above, 10 significant aspects were identified during the development of the Site EMS, of which the first six (6) (highlighted in bold below) are regularly monitored due to their significance and the implications of their potential impacts. The Significant Aspects are reviewed annually and are fully current.

1) **Energy Usage**
2) **Water Usage**
3) **Solid Waste Generation**
4) **Petroleum Usage**
5) **Material Use/Green Procurement**
6) **Greenhouse Gases**
7) Air Emissions
8) Chemical Use
9) Hazardous Waste
10) Ozone Depleting Chemicals

Environmental Management System (EMS): The HQC has an interesting position inside the National Capital Region is meeting growing challenges, and the necessity to demonstrate its ability to meet the mandates of both the Executive Orders (EO) 13693 and 13653 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 Environmental Management System (EMS) in order to:

Improve environmental performance	Increase employee involvement
Reduce liability	Improve public image of DLA
Improve compliance	Enhance customer (tax payers) trust
Reduced costs	Meet above EO and DoD mandates

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, this is at least partially based on the size and staffing of environmental offices, normally small. A key factor in our success as an organization has been the integration of environmental management functions with other key organizational processes. This has allowed us to look across the organization at matrixed roles where environmental factors were not fully understood, and has tremendously improved the McNamara Complex's environmental performance as detailed below. The Site has taken a top-down and bottom-up approach to integrate identity management capabilities in the Environmental

Management System. A large part in our success is not only top management commitment, where expectations are clearly communicated (refer to Table 1), but in DLA HQC's proactive and matrixed team of the organizations' key players, whose management of their respective environmental program areas has exceeded performance goals as exemplified in the following tables. This level communication, the commitment of key players, and broad and deep engagement by our small environmental staff have been critical and deciding factors relative to our success.

Table 1. List of DS-Fort Belvoir Site Environnemental Documents		
No.	**Environmental Management Documents**	**Date**
1.	HQC Environmental Policy Statement	17 Feb 16
2.	HQC Environmental Management System Guidelines	17 Jun 16
3.	Environmental Management Representative Designation	20 Jun 16
4.	Significant Aspect Champion Designation for Energy, Fleet Petroleum, Greenhouse Gas, Material Use, Solid Waste and Water	20 Sep 16
5.	McNamara Complex Environmental Assessment	21 Jun 16

HQC Environmental Policy Statement: Environmental stewardship is a team sport. Realizing that success in this critical area required not only an understanding of the requirements, but in fact a real empowerment of our workforce, in February 2016, the Site Director signed and published the HQC Environmental Policy Statement. This was distributed to all HQC employees, contractors and tenant agencies in order to reiterate our commitment to continually look for ways to minimize HQC environmental impacts and integrate environmental stewardship into our everyday work. It also reminded everyone that they are required to meet Executive Order 13653 – **Preparing the United States for the Impacts of Climate Change**, and Executive Order 13693 – **Planning for Federal Sustainability in the Next Decade** mandates and comply with all Federal, state and local environmental statutes, regulations and Fort Belvoir's EMS. Additionally, both in person training and on-line courses were created in order to better empower both new and existing employees. It empowered all team members to make a difference, the results of which will be illustrated later.

Program Management: In the past two years, the Site has transformed its environmental management into a top performing program, even in the face of staffing shortfalls. It started by putting in place the required programmatic structure and documentation. This structure and documentation, as you will see, is not always about leaping innovation and grand strategic miraculous efforts. It is about what we can do every day. We see challenges not as problems, but as opportunities. Opportunities that harvest organizational involvement and ownership in our environmental program across the spectrum from environmental compliance to environmental stewardship.

Technical Merit: The HQC Site has been very successful in pursuing and addressing areas where small investments can bring about extensive environmental results and cost savings. The facility water-use reduction project is one of several projects described below where the HQC achieved significant savings for a modest investment. A savings that will soon be in the millions of dollars providing resources in support of the warfighter. Most significantly, HQC has exceeded and continues to exceed the water-use reduction goal mandated by EO 13693, outlined in the DoD Strategic Sustainability Performance Plan (SSPP). A remarkable achievement for the Department of Defense where the Agency faces the challenge of reaching the department's strategic sustainability water-use goal as set in the DoD SSPP.

Orientation to Mission: Everyone at the HQC is tasked with ensuring the Site follows all applicable regulations and all DLA employees are responsible for upholding the DLA mission. Information is disseminated to employees during their new employee orientation and during annual refresher trainings. The objectives, goals and progress of the EMS are reinforced through programs and outreach. This outreach includes extensive visits to other worksites in order to both mollify fears that exist and to support self-evaluation of the environmental aspects that are in play. This in turn leads improved understanding, not only of how environmental issues impact our mission, but of how we can do things in a more environmentally effective way as an agency, and improve our support to the warfighter. Our warfighters are the mission.

Transferability: Transferability and reproducibility are great characteristic of many, if not all, of the environmental undertakings. Whatever the Site was able to achieve here, can be duplicated in many of DLA Primary Level Field Activities (PLFA). While DLA is in the process of developing its Sustainability program, through engagement with other Sites or PLFA representatives, DoD workgroup efforts

Stakeholder Interaction: Environmental stewardship and compliance are team accomplishments. It was apparent from the beginning that this effort would only achieve the desired outcomes with the full support of everyone working on the complex. First, in order to achieve early leadership and key stakeholder buy-in for the program, EMS Steering Committee meetings were instituted each quarter with stakeholders from every tenant agency at the Complex. The purpose was to coordinate and gain inputs on every project, activity and initiative. The environmental arena, is a contested area where stakeholder perceptions are key. Having little in the way of outright authority over tenants and stakeholders, program officials must build effective relationships in order to work by, with and through those who own processes. In addition, the Site Director holds quarterly HQC Consulting Group meetings with DLA staff and tenant agencies to discuss HQC services, events and developments; HQC Complex environmental issues are always one of the priorities discussed. During the Integrated Environmental Performance Review (IEPR), all stakeholders are invited to participate and the team reaches out to individual employees through an aggressive marketing campaign and the addition of the annual EMS Awareness Training to all DLA employee-training plans. Lastly, we should not under-emphasize the importance of the ground game, where environmental personnel spend a significant amount of time supporting both the drafting of environmental procedures and preparing stakeholders for coming events.

Impact/Outcomes: Looking forward, HQC has maintained a focus on "gifts that Keep Giving", a one time savings is of little value to the next budget cycle. This philosophy has driven us to

concentrate in areas, and on projects (as mentioned below) including retro-fitted water faucets, energy reduction motion sensors and others, that have notable current impacts and will continue to save money and resources long into the future. This provides DLA with the opportunity to invest in other areas which improve our support to our Service members.

Environmental Performance of HQC EMS Signification Aspects:

Of the six (6) significant aspects we regularly monitor, four (4) are ALREADY IN FULL COMPLIANCE with Executive Orders 13693 and 13653 future goals and targets. Rather than a pre-defined end, we are finding that this success is driving a culture of micro-innovation where people can express themselves in environmentally effective ways. This includes moving or getting rid of materials, consolidating service and maintenance contracts for greater pool efficiency, re-organizing storage areas to make inventory less time consuming, and a host of other outcomes.

Water Use: 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. The HQC estimates a **26%** reduction in water usage since 2008. Beginning FY2009, DLA HQC has consistently exceeded its target in water reduction goals. Executive Order 13693 goals and targets, previously outlined in Executive Orders 13423 and 13514 (archived), mandated/mandates (sustained in EO 13693) all government agencies reduce their potable water intensity by 2% a year starting in 2007. To meet these growing water-use reduction goals, the site retrofitted 200 toilets and 227 faucets within the McNamara Complex with low flow water savings features. The toilets use 2.3 gallons less per flush while the faucets use 1.7 gallons less per minute. The project cost: $249K. The annual potable water intensity reduction continues to exceed the 2% per year-mandated goal. The project has saved 13.7 million gallons of water with a savings of $184K. As a result, DLA HQC is on track to exceed the DoD reduction goal of 36% by 2025. This effort can be duplicated at other DLA Host Sites for greater savings and mission sustainability.

Greenhouse Gas Emissions: Undoubtedly, it has taken many components to make this system work. We have excelled within the Department of Defense in exceeding the DoD goals for Greenhouse Gas Emissions outlined in the DoD Strategic Sustainability Performance Plan. In this category, we have set the standard of performance. Greenhouse Gas (GHG) emission reductions required a network of participants from both inside and outside the agency in order to produce the results. We partnered with outside agencies including NASA, participated in working groups and ultimately shared best practices to ensure that we could meet these challenging goals. Critical to our success, we effectively evaluated our processes and activities that contribute to Scope 1, 2 and 3 emissions, carefully measured, and tracked them. This meant that our fleet operators, industrial services, maintenance, and business operations folks resilience and receptivity worked in tandem to sustain reductions in our total GHG footprint. In the end, GHG were reduced by **32%** at the end of FY16 from 2008 levels per table 2 below. The reduction intensity per person is **even greater at 39%** by end of FY16, from a 2008 baseline.

Table 2. DLA HQC Carbon Footprint in MT of CO2e						
Fiscal Year	**Scope 1**	**Scope 2**	**Scope 3**	**Total**	**HQC Population**	**Intensity/ Person**
2008	2,917.84	20,280.93	0.91	23,199.69	4,966.00	4.67
2009	3,185.18	19,494.91	0.89	22,680.98	5,304.00	4.28
2010	3,156.73	19,377.54	0.86	22,535.12	5,519.00	4.08
2011	3,022.07	18,048.24	0.82	21,071.13	5,735.00	3.67
2012	2,925.19	16,816.92	0.78	19,742.88	5,950.00	3.32
2013	3,095.72	15,780.02	0.75	18,876.49	6,163.00	3.06
2014	3,134.03	16,163.62	0.75	19,298.40	6,181.00	3.12
2015	**3,151.16**	**16,291.51**	**0.73**	**19,443.40**	**6,181.00**	**3.14**
2016	**3,054.12**	**14,776.68**	**0.73**	**17,831.53**	**6,293.00**	**2.83**

Solid Waste Reduction: Solid Waste is on target and will remain on target for the foreseeable future. The Site estimates 95% diversion of solid waste from landfill to incinerator since 2012. All white paper, yard waste & open top is recycled. Overall Solid Waste generation has been reduced by **43%** since 2009 per table 3 below.

Table 3. HQC Solid Waste Generation								
Fiscal Year	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	**FY2015**	**FY2016**
Units	US Tons	US Tons	US Tons	US Tons	US Tons	US Tons	**US Tons**	**US Tons**
SW Generated	827.72	687.24	916.15	688.18	645.76	611.93	**601.18**	**472.92**
HQC Population	5,304	5,519	5,735	5,950	6,163	6,181	**6,181**	**6,293**
Intensity/person	0.156	0.125	0.160	0.116	0.105	0.099	**0.097**	**0.075**

Fleet Petroleum Use: GSA Fleet fuel usage reduction per person continues to exceed reduction goals, far exceeding the 2% annual requirement per table 4 below. DLA HQC has realized a total reduction in fuel usage from baseline year 2014 to year 2016 of 22%. As of today 88% of the HQC fleet vehicles are alternative fuel vehicles. The Site has obtained two (2) Volt Plug Hybrid vehicles, one purchased in 2012 and the other purchased in 2016.

Table 4. HQC Fleet Petroleum Usage									
Fiscal Year	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	**FY2015**	**FY2016**
Unit	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	**Gallons**	**Gallons**
Fuel Usage	18,672.3	18,896.7	19,313.9	20,125.5	21,315.3	18,830.9	16,696.8	**14,752.0**	**13,354.0**
HQC Population	4,966.0	5,304.0	5,519.0	5,735.0	5,950.0	6,163.0	6,181.0	**6,181.0**	**6,293.0**
Intensity/person	3.8	3.6	3.5	3.5	3.6	3.1	2.7	**2.4**	**2.1**

Energy Use: Reducing energy use requires a mature strategy that recognizes short term opportunities while at the same time plans for development of longer term solutions as technology matures. Among the program's strategic goals, we saw the need to continue to reduce electrical and gas consumption by improving facility energy efficiency and at the same time institutionalize a culture that increased and expected improved personnel awareness. Simply put, the strategy has been to address the low hanging, less expensive and likely good payoff projects first. This would allow us to be considerate in more costly solutions, and allow for opportunities where technology is maturing. We achieved these goals, and more as demonstrated below in our significant results:

- Completed Projects:
    - Replaced all parking lot lights with LED fixtures.
    - Replaced all 3400 interior fluorescent tube light fixtures with LEDs.
    - Installed motion sensors in break rooms.
    - Installed in rack cooling units in computer rooms.
    - Replaced several small hot water heaters with more efficient models.
    - Increased roofing insulation from R-10 to R-30
    - Installed daylight sensors in the atrium, light automatically turns off on sunny days

- FY2016 Projects
    - Replacing facilities boiler/chiller and control system -- contract awarded
    - Install a tower free cooling system: allow the outside air to cool the building on cold days -- planned.
    - Install solar water heating system in the material receiving facility -- planned.

In FY16, the HQC Site implemented additional energy saving measures that included: elimination of cover sheets for printing jobs saving energy to the printer, toner, paper and disposal costs for discarded cover sheets; placed timers on flat screen monitors in the public areas; and instituted a DLA-wide practice of having all computers power down when not active or in use.

Training:

The Site automated and increased useful content in its EMS Awareness Training Presentation through the DLA Learning Management System by having the presentation be automatically "pushed out" to all DLA employees at the McNamara Complex and emailed to those contractors without system access. In addition, the Site provides a new employee orientation training for all new Government and contractor employees during the new employee in processing.

Outreach and Recycling:

The Site continually strives to find new means to improve its customers' awareness and stewardship toward its environmental mandates through outreach activities and programs to achieve greater participation. As is the case for the recycling program at the HQC McNamara Complex, events such as the Earth Day Celebration and America Recycles Day also serve to promote and boost environmental stewardship. During Earth Day 2015 and 2016, the environmental program distributed more than 2000 tree saplings. The saplings, which are native to the Chesapeake Bay watershed, came from the non-profit organization Fairfax ReLeaf. Distributed with each tree sapling, DLA HQC employees also received information about volunteer opportunities in observance of Earth Day 2015. Employees had the chance to monitor bird nest boxes, cleanup the Potomac River watershed, and participate in a bird count for the National Audubon Society. During Earth Day 2016, a Natural Resources Specialist with Fort

Belvoir's Department of Public Works conducted a presentation on Fort Belvoir's environmental activities. An Earth Day Paperless Initiative provided HQC employees with the opportunity to convert paper records into electronic files in an effort to bring awareness to conservation.

During America Recycles Day 2016, HQC employees had the opportunity to learn more about conservation and recycling at the Complex by engaging in a trivia game. To bring awareness to the HQC EMS and recycling program, the game involved asking employees to select from a group of items the item that can be recycled at the Complex. Participants were also asked DLA HQC recycling trivia questions in order to win a prize.

HQC EMS objectives and goals are regularly emphasized promoting environmental stewardship. Initiatives include rotating posters throughout the building; providing conservation tips and recycling reminders; and disseminating email blast messages and DLA HQC screen savers to bring awareness to pertinent issues at the complex, such as printing paper reduction.

Summary:
In summary, the DLA Installation Support team at Fort Belvoir has made significant progress toward preventing or eliminating pollution at the source and implementing sustainable practices. Based on the Significant Aspects performances and environmental program management accomplishments mentioned above, it is clear that the HQC McNamara Complex is on its way to meet or surpass the mandates of Executives Order (EO) 13693. Taking a comprehensive approach to environmental sustainability, we have managed to execute our mission to provide unsurpassed service to the Warfighter, while at the same time improving our position in environmental stewardship to the benefit of the Department of Defense and our Nation. The financial savings that resulted from these environmental actions have improved DLA's overall mission performance, and benefitted our Nation's warriors. All of these accomplishments are ensuring successful achievement of the EO mandated reduction periods or deadlines.

Note:
The attached ECHO report submitted with this package regards our host (Fort Belvoir Army Reservation). The DLA McNamara Complex is a tenant on Fort Belvoir as mentioned above. None of the violations or compliance issues mentioned in the report concerns our DLA Complex activities.