

BARC ENVIRONMENTAL POLICY 15-17 BELTSVILLE AGRICULTURAL RESEARCH CENTER, AND THE OTHER BELTSVILLE LOCATIONS; THE BELTSVILLE HUMAN NUTRITION RESEARCH CENTER, AND THE U.S. NATIONAL ARBORETUM

Date: July 14, 2015

SUBJECT: Replacement of ARS, BA Environmental Policies 02-07, 03-04, 05-03, 09-01, and 14-02)

The Beltsville Agricultural Research Center (BARC) and the other Beltsville locations; Beltsville Human Nutrition Research Center (BHNRC) and the US National Arboretum (USNA) are committed to protecting human health and the environment through compliance with all environmental related management requirements; specifically, through complying with Executive Order 13693. Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade* was signed on March 19, 2015 by President Obama accelerates and increases reduction requirements of greenhouse gas (GHG) emissions, continues water reduction requirements, increase use of renewable energy, increase number of electric and hybrid fleet vehicle, reduce wastes generated. Section 16 of this EO specifically revokes the following:

- Executive Order 13423 of January 24, 2007;
- Executive Order 13514 of October 5, 2009;
- Presidential Memorandum of December 2, 2011 (Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings);
- Section 1 of Presidential Memorandum of February 21, 2012 (Driving Innovation and Creating Jobs in Rural America through Biobased and Sustainable Product Procurement);
- Presidential Memorandum of December 5, 2013 (Federal Leadership on Energy Management); and
- Presidential Memorandum of May 24, 2011 (Federal Fleet Performance).

The goal of EO 13693 is to maintain Federal leadership in sustainability and greenhouse gas emission reductions.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, promote building energy conservation, efficiency, and management by reducing agency building energy intensity measured in British thermal units per gross square foot by 2.5 percent annually through the end of fiscal year 2025, relative to the baseline of the agency's building energy use in fiscal year 2015 and taking into account agency progress to date.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, improve data center energy efficiency at agency facilities by:

- ensuring the agency chief information officer promotes data center energy optimization, efficiency, and performance;
- installing and monitoring advanced energy meters in all data centers by fiscal year 2018; and

- establishing a power usage effectiveness target of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, ensure that at a minimum, the following percentage of the total amount of building electric energy and thermal energy shall be clean energy, accounted for by renewable electric energy and alternative energy:

- not less than 10 percent in fiscal years 2016 and 2017;
- not less than 13 percent in fiscal years 2018 and 2019;
- not less than 16 percent in fiscal years 2020 and 2021;
- not less than 20 percent in fiscal years 2022 and 2023; and
- not less than 25 percent by fiscal year 2025 and each year thereafter.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, improve agency water use efficiency and management, including stormwater management by:

- reducing agency potable water consumption intensity measured in gallons per gross square foot by 36 percent by fiscal year 2025 through reductions of 2 percent annually through fiscal year 2025 relative to a baseline of the agency's water consumption in fiscal year 2007
- installing water meters and collecting and utilizing building and facility water balance data to improve water and management;
- reducing agency industrial, landscaping, and agricultural (ILA) water consumption measured in gallons by 2 percent annually through fiscal year 2025 relative to a baseline of the agency's ILA water consumption in fiscal year 2010; and
- installing appropriate green infrastructure features on federally owned property to help with stormwater and wastewater management.

If an agency operates a fleet of at least 20 motor vehicles, they will improve agency fleet and vehicle efficiency and management by taking actions that reduce fleet-wide per-mile greenhouse gas emissions from agency fleet vehicles, relative to a baseline of emissions in fiscal year 2014, to achieve the following percentage reductions:

- less than 4 percent by the end of fiscal year 2017;
- not less than 15 percent by the end of fiscal year 2021; and
- not less than 30 percent by the end of fiscal year 2025.

In addition, the BARC supports E.O.15308, Chesapeake Bay Protection and Restoration (<http://executiveorder.chesapeakebay.net/>) to improve water quality in the Anacostia Watershed through the reduction of surface water runoff and achieving TMDL goals through public and private partnerships to address all aspects of watershed management. The Anacostia Watershed is a significant watershed and the health of the Anacostia River is a major source of sediment load to the Chesapeake Bay.

- Procurement: Ensure 95 percent of new contract actions (task and delivery orders) are energy- and water-efficient, biobased, environmentally preferable, generally non-toxic, and contain recycled content.
- Electronics Stewardship: Procure products that are [Electronic Product Environmental Assessment Tool](#) (EPEAT)-registered, ENERGY STAR[®] labeled, or Federal Energy Management Program (FEMP)-designated equipment.

E.O. 13693 requires the continued use of an Environmental Management System. BARC, and the other Beltsville locations; the BHNRC, and the USNA shall strive to achieve environmental excellence through the means of good stewardship, conservation, and pollution prevention and work to meet the goals set forth in the new EO. BARC, and the other Beltsville locations; BHNRC, and USNA adopted the ISO 14001 (EMS) system of continual improvement, which incorporates the following guidelines into strategic planning and daily operations through the following documented actions and Environmental Procedures:

- Utilize the Environmental Management System as the primary management tool when addressing strategic planning, goals and targets.
- Ensure that all employees receive required Environmental Management System awareness training and competency training.
- Periodically evaluate and revise processes, procedures and best management practices to ensure good stewardship of resources.
- Identify and comply with all Federal, state and local environmental requirements.
- Consider life-cycle cost and savings in planning and making determinations about investments in all capital assets, services and procurements.
- Where applicable and possible, include E.O. 13696 required goals to be achieved.
- Develop program-related incentives and award programs to reward exceptional individual and team performance in implementing the goals of the E.O.